# U.S. ARMY CORPS OF ENGINEERS CIVIL WORKS PROGRAM

# CONGRESSIONAL SUBMISSION FISCAL YEAR 2002

# **MISSISSIPPI VALLEY DIVISION**

Budgetary information will not be released outside the Department of the Army until 3 April 2001

# Justification of Estimate for Civil Functions Activities Department of the Army, Fiscal Year 2002

## MISSISSIPPI VALLEY DIVISION

Corps of Engineers

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# Justification of Estimates for Civil Works Activities Department of the Army, Corps of Engineers Fiscal Year 2002

#### SUMMARY MISSISSIPPI VALLEY DIVISION

	FY 2001 Allocation	FY 2002 <u>Request</u>	Increase <u>or Decrease</u>
General Investigations			
Survey	\$ 8,576,000	\$12,055,000	\$ 3,479,000
Preconstruction Engineering and Design	10,398,000	4,645,000	- 5,753,000
Subtotal, General Investigations	\$ 18,974,000	\$ 16,700,000	\$ - 2,274,000
Construction, General			
Construction	\$208,971,000 <u>1</u> /	\$190,400,000 <u>2</u> /	\$ -18,571,000
Operation and Maintenance, General			
Project Operation	126,194,000	136,551,000	10,357,000
Project Maintenance	234,316,000	198,012,000	-36,304,000
Subtotal, Operation and Maintenance, General	360,510,000	334,563,000	-25,947,000
GRAND TOTAL, MISSISSIPPI VALLEY DIVISION	\$588,455,000	\$541,663,000	\$ -46,792,000

<sup>1/</sup> Includes \$20,505,000 allocated from the Inland Waterways Trust Fund.

 $<sup>\</sup>underline{\textit{2}}\textit{/}$  Includes \$11,872,000 allocated from the Inland Waterways Trust Fund.

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
	\$	\$	\$	\$	\$

- SURVEYS NEW None.
- 2. SURVEYS CONTINUING
  - a. Navigation Studies: The amount of \$1,125,000 is requested to continue four feasibility studies in Fiscal Year 2002.

#### ARKANSAS

Red River Navigation, Southwest Arkansas, AR Vicksburg District 3,355,000 2,182,000 275,000 450,000 448,000

The study area is located in northwest Louisiana and southwest Arkansas and includes the 135 miles of the Red River between Shreveport, Louisiana, and Index, Arkansas. The Red River throughout this reach is wide and shallow with an average slope of 0.7 foot per mile. Without the construction of locks and dams, commercial navigation would not be possible. Upon completion of the Red River Navigation Project in 1994 and the establishment of dependable navigation on the Red River from the Mississippi River to Shreveport, Louisiana, local navigation interest is now refocused on extending navigation into southwest Arkansas. Organizations supporting this extension of navigation include the Arkansas Red River Commission, the Red River Valley Association, and the Red River Waterway Commission. The Feasibility Cost-Sharing Agreement was executed 24 March 1999 with the Arkansas Red River Commission.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$5,910,000 which is to be shared on a 50/50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,310,000
Reconnaissance Phase (Federal)	400,000
Feasibility Phase (Federal)	2,955,000
Feasibility Phase (Non-Federal)	2,955,000

The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
LOUISIANA					
Atchafalaya River, Bayous Chene, Boeuf and Black, LA New Orleans District	1,750,000	0	250,000	100,000	1,400,000

The Atchafalaya River and Bayous Chene, Boeuf, and Black are located in Assumption, Iberville, and St. Mary Parishes in south-central Louisiana in the vicinity of Morgan City, Louisiana. The existing Atchafalaya River and Bayous Chene, Boeuf, and Black, Louisiana navigation project provides a 20- by 400- foot access channel between the Gulf of Mexico and oil and gas rig fabrication yards and offshore oil and gas service facilities located west of Morgan City and, incidentally, to facitilies located on the Atchafalaya River in the Morgan City-Berwick area. The existing channel has a problem with fluff, a flocculant clay material that flows into the Atchafalaya Bar Channel immediately after maintenance dredging. Local interests request that the existing channel be enlarged to a project depth of 35 feet, including allowances for the effects of fluff. The study would address the feasibility of providing deeper access channels to facilities along the Atchafalaya River and Bayous Chene, Boeuf, and Black. The study purpose is commercial navigation, which is an Administration priority. The local sponsor is the Morgan City Harbor and Terminal District. In a meeting on 14 February 2001, the Commission expressed its intent to cost-share in subsequent phases of the proposed project.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,250,000
Reconnaissance Phase (Federal)	250,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in January 2002. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Calcasieu Lock, LA New Orleans District	3,190,000	158,000	374,000	400,000	2,258,000

Calcasieu Lock is a feature of the Gulf Intracoastal Waterway between Apalachee Bay, Florida, and the Mexican Border (Gulf Intracoastal Waterway) Project. The lock is located east of the Calcasieu River, approximately 10 miles south of Lake Charles, Louisiana, in Calcasieu Parish. The lock prevents saltwater intrusion from the Gulf of Mexico via the Calcasieu River into the Mermentau River Basin, a major rice producing area. Calcasieu Lock, which was completed in 1950, has dimensions of 13 by 75 by 1,206 feet and is structurally sound. It is becoming congested due to increasing traffic. Studies of the Gulf Intracoastal Waterway system conducted in 1992 determined that there is an immediate need for capacity increases at Bayou Sorrel and Calcasieu Locks. Feasibility studies of Bayou Sorrel Lock are underway in the Intracoastal Waterway Locks, Louisiana study. Movements through Calcasieu Lock totaled 39.8 million tons in 1996; delays at the lock averaged 2.2 hours per tow and are projected to increase.

Fiscal Year 2001 funds will be used to continue the feasibility phase of the study.

The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,100,000. Calcasieu Lock is a feature of the Gulf Intracoastal Waterway, which is listed in Section 206 of Public Law 95-502 as an inland waterway; therefore, the feasibility study is at full Federal expense.

The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
ILLINOIS					
Hannibal Harbor, MO	400,000	0	75,000	175,000	150,000

The City of Hannibal, Missouri, is located on the right-descending bank of the Mississippi River in Marion County, 309 miles above the mouth of the Ohio River. The River and Harbors Act of 19 May 1950 authorized the construction of a small boat harbor in Pool 22, Mississippi River, at Hannibal, Missouri. The harbor construction was completed in December 1958 at a Federal cost of \$129,000. The city states that the existing harbor is obsolete, inadequate in size, and incompatible with its waterfront development master plan. The city will request deauthorization and abandonment of the existing harbor prior to construction of a new harbor. The existing harbor will be filled in using dredged material from the proposed new harbor. The abandoned existing harbor will become an extension of the existing river front park upon completion of the filling process. The study will address the feasibility of relocation and modernization of the Hannibal Harbor.

Fiscal Year 2001 funds are being used to initiate the reconnaissance phase. Fiscal Year 2002 funds will be used to complete the reconnaissance phase at full Federal expense, if the reconnaissance report is certified to be in accord with policy, and continue into the feasibility phase. The estimated cost of the feasibility phase is \$600,000, which is to be shared on a 50-50 basis by Federal and non-Federal interest. A summary of study cost-sharing is as follows.

Total Estimated Study Cost	\$700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	300,000
Feasibility Phase (Non-Federal)	300,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility phase completion date is being determined.

Total - Navigation Studies 8,695,000 2,340,000 974,000 1,125,000 4,256,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
•	\$	\$	\$	\$	\$

b. Flood Damage Prevention Studies: The amount of \$1,547,000 is requested to continue seven and complete one feasibility study in Fiscal Year 2002.

IOWA

Des Moines and 1,620,000 439,000 450,000 450,000 281,000 Raccoon Rivers, IA Rock Island District

The City of Des Moines, located in Polk County, lowa, has several rivers and waterways that traverse the urban and fringe areas including the Des Moines River, Raccoon River, and numerous small tributaries. These areas continually sustain flood damages. During the 1993 flood, Polk County suffered more than \$152,000,000 in flood damages. In addition, the county was without water and sewer for approximately a week causing the closure of most of the businesses and industry in the county. More than 3,000 properties were inundated. The City of Des Moines has had a long-standing cooperative relationship with the Corps of Engineers culminating with the recent completion of the Valley Gardens levee system and near completion of the Walnut Creek/Raccoon River levee system. However, evaluation of the city's entire flood damage prevention system identified a number of areas deemed to be deficient. Continuing flooding and bank erosion on the Des Moines River and Raccoon River have produced strong local support for additions to, or modifications of, the flood damage prevention and water resources projects within the City of Des Moines. The feasibility study would develop and evaluate alternative plans and recommend a plan to address the identified problems and opportunities. The Feasibility Cost Sharing Agreement was executed with the City of Des Moines in September 1999.

Fiscal Year 2001 funds are being used to continue the feasibility phase. Funds requested in Fiscal Year 2002 will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$3,040,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,140,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,520,000
Feasibility Phase (Non-Federal)	1,520,000

The reconnaissance phase was completed in September 1999. The feasibility phase completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
LOUISIANA					
Ascension Parish, LA	2,275,000	0	200,000	100,000	1.975,000

The study area is located in southeastern Louisiana and includes the entire Ascension Parish area. Ascension Parish is located between New Orleans and Baton Rouge and includes the incorporated areas of Gonzales, Sorrento, and Donaldsonville, LA. Ascension Parish was included in the Amite River and Tributaries reconnaissance report completed in November 1984. Funds in the amount of \$25,000 are being used to prepare the project study plan for Ascension Parish currently under negotiation. The study will investigate methods to provide flood control improvements for Ascension Parish, Louisiana. The alternatives include a flood gate on Henderson Bayou and associated levee, channel improvements, and nonstructural alternatives, such as flood proofing, structure raising, and acquisitions. Flood control improvements are needed to reduce flood damages to residential and commercial development, which is consistent with Administration policy. Ascension Parish government has expressed its intent to cost share the feasibility phase of the study and negotiation is currently underway. The Feasibility Cost Sharing Agreement is scheduled to be executed in May 2001.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase and continue into the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$4,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,525,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	2,250,000

The reconnaissance phase is scheduled for completion in May 2001. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Calcasieu River Basin, LA New Orleans District	2,100,000	100,000	300,000	200,000	1,500,000

The study area is located in southwestern Louisiana and includes Vernon, Rapides, Beauregard, Allen, Calcasieu, Jefferson Davis, and Cameron Parishes. Development in the study area is subject to repetitive flooding particularly in the Lake Charles area in the southern portion of the Calcasieu Basin. Headwater flooding and backwater flooding from the Calcasieu River is a major problem in the Lake Charles area and in the Bayou Choupique area west of Sulphur, Louisiana. Fish and wildlife habitat has been lost to development in the upper basin and to erosion, subsidence, saltwater intrusion, and development in the estuarine areas of the lower basin. The study will address the feasibility of measures to reduce flooding and restore fish and wildlife habitat in the study area. The Louisiana Department of Transportation and Development is the potential sponsor for the study. The anticipated outputs of flood damage prevention and environmental restoration are in accord with Administration policy.

Fiscal Year 2001 funds are being used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in July 2001. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Hurricane Protection, LA New Orleans District	4,500,000	0	100,000	100,000	4,300,000

The study encompasses a multi-parish area in southeastern Louisiana. Hurricanes pose a significant threat to highly populated and industrial areas in this part of the state. The study will review the currently authorized hurricane protection projects and determine if modifications are required to provide a higher level of protection. State and local governments have expressed concern that the current hurricane protection measures do not provide protection for category 4 or 5 storms. The current projects provide protection for the equivalent of a fast-moving category 3 storm or less. If a stronger storm impacts the coastal area, extreme damages and loss of life can be anticipated. The State of Louisiana supports the study and would be expected to cost share in the feasibility study. Areas to be studied will include raising the current levee systems, construction of barriers that may prevent storm surge from reaching the protected areas, restoring/maintaining barrier islands, maintaining shorelines and land bridges to prevent storm surges from moving inland, and wetlands construction and restoration that could lower storm surge elevations. The economic damage and loss of life caused by a category 4 or 5 storm would be extreme and justifies proceeding with the study in the budget year. The study and its outputs are in accord with Administrative policy. The reconnaissance phase is scheduled to be completed in July 2002, which is 18 months after initiating the study.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$8,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$8,500,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	4,000,000
Feasibility Phase (Non-Federal)	4,000,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Plaquemines Parish Urban Flood Control, LA New Orleans District	2,100,000	0	100,000	100,000	1,900,000

Plaquemines Parish is located along both banks of the Mississippi River from New Orleans, Louisiana, to the river's mouth, a distance of about 80 miles. The July 1999 population of the parish was about 25,700. All of the development in the parish is located along the alluvial ridges of the Mississippi River and is protected from river flooding by the Mississippi River Levees feature of the Mississippi River and Tributaries Project. The rapidly growing New Orleans suburb of Belle Chasse and the Alvin Callender Naval Air Station are located in the northern end of the parish contiguous to New Orleans. Other communities include Braithwaite and Pointe a la Hache on the east bank of the river and Buras, Port Sulphur and Venice on the west bank. The Westwego to Harvey Canal Hurricane Protection Project, which is under construction, will provide hurricane protection to the Belle Chasse area and the Alvin Callender Naval Air Station. The New Orleans to Venice Hurricane Protection Project, which is nearing completion, provides hurricane protection to the more developed areas in the southern reaches of the parish. Flooding in developed areas in the parish, particularly the rapidly developing Belle Chasse area, is increasing. Flood control improvements are needed to reduce flood damages to residential development, which is consistent with Administration policy. Plaquemines Parish Government has requested a Federal project to address rainfall flooding problems in the area and has expressed its intent to cost share the feasibility phases of the study.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$4,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in January 2002. The feasibility study completion date is being determined.

#### Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
St. Bernard Parish Urban Flood Control, LA New Orleans District	1,710,000	100,000	375,000	300,000	935,000

St. Bernard Parish is located on the east bank of the Mississippi River south of, and contiguous to, the City of New Orleans, Louisiana. The July 1998 Census Bureau estimated population of the parish was approximately 66,100. The area is protected from Mississippi River and hurricane flooding by a levee loop called the Chalmette area loop that is formed by the west bank river levee and the Chalmette area feature of the Lake Pontchartrain, Louisiana, and vicinity hurricane protection project. Most of the parish's population lives within a smaller, internal levee loop adjacent to the Mississippi River formed by the river levee and local levee. Major floods caused by heavy rainfall have occurred in 1978, 1980, 1982, 1983, and 1995. Damages during the 1978 flood were approximately \$22,000,000 and St. Bernard Parish was declared a disaster area. Estimated damages for the 1983 flood were \$2,500,000 to 400 homes, and for the 1995 flood, \$5,700,000 to about 700 homes. Flood control improvements are needed to reduce repetitive damages to residential development, which is consistent with Administration policy. The St. Bernard Parish Government and the Lake Borgne Levee District are the cost-sharing sponsors for the feasibility phase. The feasibility cost sharing agreement was signed on 23 February 2001.

Fiscal Year 2001 funds are being used to continue into the feasibility phase. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$3,200,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$3,310,000
Reconnaissance Phase (Federal)	110,000
Feasibility Phase (Federal)	1,600,000
Feasibility Phase (Non-Federal)	1,600,000

The reconnaissance phase was completed on 23 February 2001. The feasibility study completion date is being determined.

#### Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
St. Charles Parish Urban Flood Control, LA New Orleans District	2,200,000	0	100,000	100,000	2,000,000

St. Charles Parish is located on the east and west banks of the Mississippi River west of, but not contiguous to the city of New Orleans, Louisiana. The July 1998 Census Bureau estimated population of the parish was approximately 48,300. The east bank area is protected from flooding from Mississippi River and hurricane flooding by a levee loop formed by the Mississippi River east bank levee and the under-construction St. Charles Parish feature of the Lake Pontchartrain, Louisiana, and Vicinity hurricane protection project. The west bank area is protected by the Mississippi River west bank levee and, to some extent, by local (non-Federal) hurricane protection levees. Major floods caused by heavy rainfall have occurred in 1978, 1980, 1982, 1983, and 1995. For the 1995 flood, damages totaled \$66,800,000 to about 2,300 homes. Flood control improvements are needed to reduce repetitive damages to residential development, which is consistent with Administration policy. By letter of October 25, 1999, the St. Charles Parish Council stated its intent to act as the cost sharing sponsor for the feasibility phase.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$4,200,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,300,000
Reconnaissance Phase (Federal)	100,00
Feasibility Phase (Federal)	2,100,000
Feasibility Phase (Non-Federal)	2,100,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
West Shore- Lake Pontchartrain, LA New Orleans District	1,850,000	1,294,000	359,000	197,000	0

The West Shore-Lake Pontchartrain, Louisiana study will address hurricane flooding problems in St. Charles Parish west of the Bonnet Carre' Floodway, St. John the Baptist Parish and St. James Parish. The main population centers in the study are LaPlace and Reserve. Major flooding in the area occurred as a result of Hurricane Betsy (1965) and Juan (1985), and as a result of the 1973 flood on the Mississippi River. Damages totaled \$1,000,000 for Hurricane Betsy, \$950,000 for the 1973 flood, and \$4,000,000 for Hurricane Juan. Population in the study area has been increasing with populations of 25,500 in 1960; 30,300 in 1970; 40,600 in 1980; and 47,700 in 1990. There are approximately 4,000 residential structures in the study area vulnerable to hurricane flooding. Population and potential damages are expected to continue to grow due to the lack of undeveloped land in the New Orleans area. Average annual damages are estimated to be \$9,000,000. The plan identified in the June 1997 reconnaissance report would provide for construction of 105 miles of levees and floodwalls extending from the west guide levee of the Bonnet Carre' Spillway to US Hwy 61 in the vicinity of the Reserve-Relief Canal. The estimated construction cost for this plan is \$60,000,000, with an average annual cost of \$4,500,000 and a benefit-cost ratio of 2.1. The Pontchartrain Levee District entered into an agreement to provide the non-Federal share of the feasibility study cost in March 1998. Support for this project is evidenced by the numerous letters from state and local governments and from Congressmen. This study and its anticipated outputs are in accord with Administration policy.

Fiscal Year 2001 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2002 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,700,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,200,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,350,000
Feasibility Phase (Non-Federal)	1,350,000

The reconnaissance phase was completed in March 1998. The feasibility study is scheduled for completion in September 2002.

Total - Flood Damage Prevention Studies 18,355,000 1,933,000 1,984,000 1,547,000 12,891,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
	\$	\$	\$	\$	\$

- c. Shoreline Protection Studies: None.
- d. Special Studies: The amount of \$1,511,000 is requested to continue one and complete one feasibility study in Fiscal Year 2002.

#### **ILLINOIS**

Peoria Riverfront Development, IL 1,090,000 479,000 300,000 311,000 Rock Island District

Peoria, Illinois, is located on the Illinois River in Peoria County. The study area includes the portion of the Illinois River and its tributaries that flows next to, or directly impacts, the downtown Peoria Riverfront Development project. This stretch of river, a riverine lake called Peoria Lake, has lost roughly 70percent of its volume with depths reduced from approximately 8 feet to 2.5 feet since 1903. This loss of depth has seriously impacted fish and wildlife. Contributing to the filling is sediment deposition from creeks draining into the Illinois River. The study is evaluating ecosystem restoration opportunities within the lake and on the tributaries as well as the potential use of suitable dredged material for beneficial uses.

Fiscal Year 2001 funds will be used to continue the feasibility phase. The funds requested for Fiscal Year 2002 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$1,980,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,080,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	990,000
Feasibility Phase (Non-Federal)	990,000

The reconnaissance phase was completed in September 1999. The feasibility study is scheduled for completion in March 2002.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Upper Mississippi River System Flow Frequency Study, IL, IA, KS, MN, MO, NE and WI Rock Island District	8,191,000	5,683,000	736,000	1,200,000	572,000

The study area includes the Upper Mississippi River and its major tributaries. Water-surface profiles adopted in 1966 were employed until an interagency group the Floodplain Management Task Force (composed of representatives from five states, Federal Emergency Management Agency, U.S. Geological Survey, Soil Conservation Service, and the Corps of Engineers) - adopted revised profiles in 1979. The 1979 profiles were based on updated data and a regional skew instead of the zero skew used in the 1966 profiles. This resulted in profiles about five feet lower in the southern reaches of the Upper Mississippi River when compared to the 1966 profiles. With 15-plus years of additional data and several high-water events over the last 30 years, an update of the profiles is needed. The Galloway Report recommended that the methodology of determining flood-flow frequency on the Upper Mississippi and the Lower Missouri Rivers should be studied. In addition, the original agreement stated that the flood-flow frequencies should be revisited as time and technology progress.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. Fiscal Year 2002 funds will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$7,841,000, which is being conducted at full Federal expense.

The initial scope of study was completed in December 1997. The feasibility study completion date is being determined.

Total - Special Studies 9,281,000 6,162,000 1,036,000 1,511,000 572,000

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
-	\$	\$	\$	\$	\$

e. Watershed/Ecosystem Studies: The amount of \$3,567,000 is requested to continue eight feasibility studies in Fiscal Year 2002.

#### ILLINOIS

Alexander and Pulaski Counties, IL 1,712,000 1,384,000 150,000 130,000 48,000 St. Louis District

The study area, approximately 740 square miles, is located in portions of the southernmost Illinois counties of Alexander, Pulaski, Union, Johnson, Massac, and Pope. For reasons of marginal flood control benefits, changing land use, the recognized environmental uniqueness of the area and changing Corps wetlands restoration policy, the investigation has shifted from its original focus on flood control to its present purpose of habitat restoration. Factors contributing to the area's uniqueness include: trees over 1,000 years old; the presence of both a state refuge (9,000 acre Cache River State Natural Area) and a national refuge (35,000 acre Cypress Creek National Wildlife Refuge); exceptionally large trees including two national records and twelve state champions; numerous endangered species; and two national natural landmarks (Lower Cache River Swamp and Heron Pond-Little Black Slough). The study area is one of six areas in the United States where four or more physiographic regions overlap. Of these, the Cache River is considered by many experts to be the most diverse. Serious habitat degradation has occurred along the Cache River at least partly caused by prior Corps projects, including the Cache River Levee and the Cache River Diversion projects. Sedimentation from tributary streams is choking Lower Cache River Swamp, and riverbed entrenchment threatens to drain Heron Pond-Little Black Slough. The U.S. Fish and Wildlife Service, Illinois Department of Natural Resources (IDNR), The Nature Conservancy, and Ducks Unlimited have turned to the Corps of Engineers for environmental engineering solutions to these problems. If environmental engineering solutions are not undertaken, this unique wetland area will be lost within decades. The local sponsor, IDNR, signed the feasibility cost sharing agreement on 2 November 1994. IDNR recently requested additional modifications to the recommended project plan. This added work will delay completion of the feasibility phase.

Fiscal Year 2001 funds are being used to continue the feasibility phase, and of the funds requested for Fiscal Year 2002 funds will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$2,320,000, which is to be shared on a 50/50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,872,000
Reconnaissance Phase (Federal)	552,000
Feasibility Phase (Federal)	1,160,000
Feasibility Phase (Non-Federal)	1,160,000

The reconnaissance phase was completed in November 1994. The completion date for the feasibility phase is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Illinois River Ecosystem Restoration, IL Rock Island District	2,725,000	277,000	375,000	825,000	1,248,000

The Illinois River and Waterway is a major tributary of the Upper Mississippi River System (UMRS). The UMRS is designated a nationally significant ecosystem by the Fiscal Year 1985 Supplemental Appropriations Act and the Water Resources Development Act of 1986, which mandated that the rivers be managed to balance competing interests in this natural resource. The Illinois River Basin encompasses 30,000 square miles, covering 44 percent of the land area of the State of Illinois. The principal problems impeding the restoration of habitat in the Illinois River Basin are sedimentation of backwaters and side channels, degradation of tributary streams, fluctuations in hydrologic regimes and water levels, and other adverse impacts caused by human activity. Particular emphasis will be placed on identifying restoration activities that are delineated in the State of Illinois' "Integrated Management Plan for the Illinois River Watershed" report. Ongoing efforts include developing site specific projects and conducting a multi-agency restoration needs assessment to identify desired future conditions and restoration needs in the basin. Potential recommendations include activities within the river corridors such as island creation, side channel restoration, protection and creation of wetlands, improved water level management, and floodplain function. In addition, efforts will be focused on potential restoration of the smaller tributaries and watersheds through stream and wetlands restoration, water retention, and riparian buffers. The Feasibility Cost Sharing Agreement with the State of Illinois was signed on 4 August 2000.

Fiscal Year 2001 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,250,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,350,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,625,000
Feasibility Phase (Non-Federal)	2,625,000

The reconnaissance phase was completed in August 2000. The completion date for the feasibility study is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Rock River, IL and WI Rock Island District	1,555,000	158,000	525,000	300,000	572,000

The Rock River originates in the lake region of southeastern Wisconsin and flows southward to join the Mississippi River just below Rock Island, Illinois. The watershed includes all or parts of 13 counties in Wisconsin and 15 in Illinois. Major tributaries of the Rock River are Green River, Rock Creek, Elkhorn Creek, Kishwaukee River, Pecatonica River, Sugar River, Turtle Creek, and Yahara River. Potential local sponsors include the states of Wisconsin and Illinois. The study will address flood control and environmental restoration opportunities throughout the drainage basin and will evaluate the overall degradation of the Rock River ecosystem. Environmental restoration activities could include limited stream restoration, wetland creation, wildlife habitat restoration, land surface restoration, recommendations for maintaining viable populations of native species, and other engineering solutions to environmental problems in the watershed. A holistic review of ecosystem management practices will be conducted in partnership with state and Federal agencies to restore fish and wildlife habitat and in the development of a system-wide management plan. Particular emphasis will be placed on restoration of wetlands, neotropical migrants, and Federal and state significant species.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense, and if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase. The funds requested for Fiscal Year 2002 will be used to continue the feasibility study phase. The preliminary estimated cost of the feasibility phase is \$2,910,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$3,010,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,455,000
Feasibility Phase (Non-Federal)	1,455,000

The reconnaissance phase is scheduled for completion in June 2001. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
LOUISIANA					
Amite River and Tributaries Ecosystem Restoration, LA New Orleans District	2,100,000	100,000	200,000	300,000	1,500,000

The study area includes the 2,000-square-mile Amite River drainage basin in southeastern Louisiana and southwestern Mississippi. Approximately 30 miles of the Amite River corridor have directly experienced degradation of fish and wildlife habitat with potentially many more miles indirectly negatively impacted. Bottomland habitats continue to decrease in area and diversity as vegetation is removed. Approximately 10,690 acres have been directly disturbed in the study area and the potential exists for a total degradation to 24,000 acres. The degradation includes a reduction in wildlife habitat, stream and floodplain environment, and aggravation of existing flooding problems. Problems can be attributed to wider floodplain and shallower water depths, reduction in river length and the resulting steepened river gradient, reduction of the sinuosity through meander cut-offs, increased turbidity, increased temperature, and an increase in the unvegetated areas and man-made changes within the river corridor. River length from 1940 to 1981 has been reduced as much as 10 percent. Preliminary analyses indicated that a 20 percent reduction in river length would produce a stage increase of 6 to 9 inches inducing structural flooding. The steeper gradient of the river increases scour forces, and bridge collapses have been attributed to this force. Removal of riparian vegetation and mining of point bars reduce the resistance of riverbanks to erosion during floods. The elimination of streambank vegetation and mining operations produces a turbid stream negatively impacting many fish species. The Amite River has three to four times the number of exceedances of turbidity than comparable streams in the vicinity. As the habitat deteriorates, wildlife that uses the river and floodplain ecosystem decreases in quantity and diversity. The Amite River, which once flooded a densely egetated valley bottom, now spreads across bare sand areas and tailings piles at mining sites allowing a multitude of geomorphic changes during flood events. The study will determine the feasibility of restoring the Amite River ecosystem to a condition similar to its natural state. This effort will consider the physical and limnological aspects of the site, and its broader landscape or watershed setting, to address all related issues and constraints. Alternatives will be developed to reduce turbidity, lower temperature, and reduce the extent of the physical changes within the river corridor in an effort to achieve fish and wildlife restoration, and restore outdoor recreation opportunities. This effort will significantly contribute to the watershed management objectives of the State of Louisiana. The heel splitter clam, an endangered species, exists in the basin and is threatened by the degraded stream conditions. The potential local sponsor for this study is the Louisiana Department of Environmental Quality.

Fiscal Year 2001 funds are being used to continue into the feasibility phase. The funds requested for Fiscal Year 2002 funds will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in May 2001. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Louisiana Coastal Area Ecosystem Restoration, LA New Orleans District	17,500,000	1,424,000	1,750,000	1,072,000	13,254,000

The study area encompasses a complex coastal wetlands and barrier island ecosystem located in south Louisiana, from the Sabine River to the Pearl River. This area includes an infrastructure that supports coastal communities, commercial and industrial developments, a robust seafood industry, international inland and sea ports, and oil and gas production and processing facilities. There are numerous Federal projects in the area, which include those for flood protection, navigation, river control, and control of salinity and water levels. Developments in the study area, along with other factors such as sea level rise, have contributed to the accelerated deterioration of coastal Louisiana's wetlands. The Louisiana coastal wetlands represent about 40 percent of the Nation's total and are experiencing about 80 percent of the entire Nation's wetlands losses. Prior to these developments and the construction and operation of Federal projects, the south Louisiana coastal ecosystem was largely self-sustainable. However, if no action is taken to protect and restore this ecosystem, the Louisiana coastal wetlands are in jeopardy of permanent and irreversible loss. In a coastwide grassroots effort termed the Coast 2050 initiative, Federal and state resource agencies, local governments, special interest groups, and the public developed the Coast 2050 Plan. This plan, completed in December 1998, documents the perceived coastal problems and describes potential strategies for sustainable coastwide ecosystem restoration. The State of Louisiana provided a letter of intent dated 22 March 1999 to cost-share as the non-Federal sponsor of the feasibility study. The Coast 2050 Plan supports the Louisiana Coastal Area—Ecosystem Restoration, Louisiana reconnaissance report approved May 1999. The primary purpose of the study is environmental restoration which is in accord with Administration policy. Nine basin feasibility studies are planned for execution under the Louisiana Coastal Area authority. The Feasibility Cost Sharing Agreement wa

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$35,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$35,000,000
Reconnaissance Phase (Federal)	N/A
Feasibility Phase (Federal)	17,500,000
Feasibility Phase (Non-Federal)	17,500,000

The reconnaissance phase was completed in February 2000. The feasibility study completion date is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
MINNESOTA					
Upper Mississippi River, Watershed Management, Lake Itasca to Lock and Dam 2, MN St. Paul District	3,105,000	150,000	187,000	200,000	2,568,000

Conditions in the Upper Mississippi River basin have changed since the original headwaters reservoirs were constructed in the early 1900's. From its source at Lake Itasca in northern Minnesota, to Lock and Dam 2 at Hastings, Minnesota, the Upper Mississippi River is suffering from impacts of almost 100 years of continual changes. This area is faced with increased flood damage reduction needs, reservoir operational plans that are inconsistent with today's problems, land and water development pressures, more definitive Tribal rights, dwindling natural resources, decline of fish and wildlife populations, increased demands for water supplies, and water quality impacts. There is a growing recognition that addressing the needs in this part of the Mississippi River is important to the region, as is maintaining the viability of the lower Mississippi River. Resource managers at all levels of government recognize the need for a cooperative partnership and development of a coordinated and comprehensive land and watershed development and management strategy that addresses all of these needs. High reservoir levels in late fall 1999 have exacerbated the problems in the headwater reservoir area but have also created immediate opportunities to focus on the flood damage reduction needs and associated water and related land issues. Likewise, documented experiences from the drought of 1987-1988 defined the water supply and water quality needs and associated water and related land issues. The study will address solutions to the problems in a holistic manner. Potential study sponsors include the Minnesota Pollution Control Agency, the Mississippi Headwaters Board, the Metropolitan Council, and the Minnesota Department of Natural Resources.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense and continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,890,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,050,000
Reconnaissance Phase (Federal)	160,000
Feasibility Phase (Federal)	2,945,000
Feasibility Phase (Non-Federal)	2,945,000

The reconnaissance phase is scheduled for completion in May 2001. The feasibility study completion date is being determined.

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Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Red River of the North Basin, MN, ND, SD and Manitoba, Canada St. Paul District	8,210,000	0	200,000	500,000	7,510,000

The Red River of the North, a northward flowing stream, originates at the convergence of the Ottertail River, Minnesota and Bois de Sioux River, Minnesota and North Dakota and ends at Lake Winnipeg in Manitoba, Canada. Within the United States, the Red River drains portions of South Dakota, Minnesota and North Dakota and forms the border between the latter two. The basin has lost much of the natural environment that existed in early settlement times, and flooding has repeatedly caused economic and human hardship. Major flood events totaling billions of dollars in damages have occurred in 1826, 1852, 1893, 1897, 1914, 1919, 1950, 1974, 1975, 1978, 1979, 1985, 1989, 1996, and 1997. Significant floods with substantial documented damages occurred on tributaries in other years as well. Severity of flooding is on the rise. Drainage, river modifications (many by the Corps), and land use changes for enhancement of agriculture adversely affected the natural ecosystems. Parts of the basin are in a state of accelerating deterioration. The study is urgently needed to identify projects, verify Federal interests, and establish feasibility in proceeding with flood damage reduction and ecosystem restoration projects using a variety of alternatives, including wetland and stream restorations, to address flooding, drought, erosion and sediment discharge, water quality, and creation of wildlife habitat and connectivity. The goal is to achieve a sustainable, healthy balance between development for communities and agriculture and preservation or enhancement of natural resources through a holistic watershed approach. Solutions will require modifications to most Corps channel projects, which are now contributing to ecosystem deterioration. The study will build on initiatives of the International Joint Commission Red River Basin Task Force study, the Red River Mediation Agreement, the International Flood Mitigation Initiative (IFMI) Report, and others in cooperation with the existing and broad-based network of participants. Federal agencies, State agencies in Minnesota, North Dakota, and South Dakota, local units of government, non-profit environmental organizations, Canadian interests, business and agricultural representatives, and citizens participating and supporting these initiatives see this study as critical to continued basin planning and implementation. The Red River Basin Board passed a resolution supporting this study; the IFMI also showed strong interest; Audubon, Minnesota Center for Environmental Advocacy, and other environmental organizations actively backed this study. Willing cost-share sponsors include the States of North Dakota and Minnesota, watershed entities such as the Red River Watershed Management Board, and local units of government such as the city of Fargo which is at risk during larger flood events. The reconnaissance study will be completed within one year. Feasibility studies will follow for projects that have Federal interest.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$16,020,000 which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$16,220,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	8,010,000
Feasibility Phase (Non-Federal)	8,010,000

The reconnaissance phase is scheduled for completion in December 2001. The feasibility study completion schedule is being determined.

Mississippi Valley Division

Study	Total Estimated Federal Cost	Allocation Prior to FY 2001	Allocation FY 2001	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002
WISCONSIN	φ	φ	φ	φ	Ψ
Baraboo River, WI	2,650,000	0	100,000	240,000	2,310,000

The Baraboo River Basin is located in Monroe, Vernon, Juneau, Sauk, and Columbia Counties of Wisconsin. The Baraboo River is a tributary of the Wisconsin River, which flows into the Mississippi River near Prairie du Chien, Wisconsin. As early as the 1840's, dams were constructed to supply waterpower for operation of mills and later for electricity. In all, four dams were built on the Baraboo River. Three were in a 5-mile stretch called the Baraboo Rapids in Columbia County and the fourth was at La Valle in Sauk County. Two dams have been removed and the other two dams are in a deteriorated condition and no longer serve the economy of the region. Besides being a safety hazard, these dams have a negative impact on the environment and ecology of the river by blocking natural migration routes of fish and aquatic fauna, preventing them from reaching important spawning, rearing, and feeding habitats. Impoundments behind the dams in the Baraboo Rapids serve as sediment traps, which suffocate high quality aquatic habitat under layers of fine-grained sediments. Compounding the situation is an accelerating degradation of ecosystems within the watershed, due to land use changes and development, which has affected wetlands, water quality, and riparian areas. The proposed study will establish a Federal interest in proceeding with ecosystem restoration projects such as dam removals; channel restoration; restoration of aquatic and riparian habitats; erosion and sediment control; and wetland restorations for reducing flood damage and improving water quality, fisheries, populations of endangered and threatened species, and natural river equilibrium. It is expected that a combination of structural and nonstructural solutions will be necessary to achieve the objectives for the long term. Fully addressing the deteriorated state of the river system will require a holistic assessment of the watershed, implementation of numerous ecosystem restoration projects beyond dam removal, and preparation of a management plan for the long-term vitality of the river system. The study will take full advantage of historical data on the environment, water quality, aquatic habitat, and hydrologic data and models. The Wisconsin Department of Natural Resources has expressed a strong interest in being the local sponsor. Other supporters and potential partners are Sauk County, the Sand County Foundation, local watershed boards, and the City of Baraboo and other communities in the watershed. The Wisconsin Department of Natural Resources looks for this study to serve as a model for other watersheds in the Wisconsin River Basin.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,100,000 which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,200,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,550,000
Feasibility Phase (Non-Federal)	2,550,000

The reconnaissance phase is scheduled for completion in December 2001. The feasibility study completion date is being determined.

Total - Watershed/Ecosystem Studies 39,557,000 3,493,000 3,487,000 29,010,000

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
f. Comprehensive Studies: The amount ARKANSAS	of \$581,000 is requested to contir	nue one feasibility study	in Fiscal Year 2002.		
White River Basin Comprehensive, AR and MO Memphis District	2,000,000	0	375,000	581,000	1,044,000

The White River Basin comprises approximately 27,765 square miles of which 10,622 square miles are in the southern part of Missouri and the remaining 17,143 square miles are in the northern and eastern portion of Arkansas. The basin contains five large Corps multi-purpose lakes: Beaver, Table Rock, Bull Shoals, Norfork, and Greers Ferry. Clearwater Lake, primarily for flood control, is also in the upper basin. This comprehensive basin study will investigate water resource related problems such as navigation, restoration and protection of environmental resources, water quality, hydropower, flood damage reduction, and water supply. Local interests, local industries, and beneficiaries in adjacent areas desire navigation improvements. The area is deemed significant as a migratory waterfowl wintering area and includes several Federal and state wildlife refuges. Releases from Corps lakes sometime fail to meet state water quality standards for dissolved oxygen and adversely affect the ecosystem below the dam. Land use practices result in nutrient runoff (both point and non-point sources), sediment, and other water quality factors that affect water supply reserves, hydropower capability (by placing restrictions on releases), recreational opportunities, and fish and wildlife habitat in the entire basin. Federal, state, and private natural resource agencies and organizations are highly supportive of conducting a comprehensive study. The potential sponsor would likely be an agency of the State of Arkansas and the state of Missouri.

Fiscal Year 2001 funds are being used to develop a scope of studies and a project management plan, execute a study cost-sharing agreement, and initiate basin-wide studies. Fiscal Year 2002 funds would be used to continue basin-wide studies. The preliminary estimated cost of the study is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,000,000
Federal Cost	2,000,000
Non-Federal Cost	2,000,000

The study is authorized by Section 729 of the Water Resources Development Act of 1986, as amended by Section 202 of the Water Resources Development Act of 2000. The study completion date is being determined.

Total - Comprehensive Studies 2,000,000 0 375,000 581,000 1,044,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
·	\$	\$	\$	\$	\$

g. Project Review Studies: The amount of \$3,724,000 is requested to continue one feasibility study in Fiscal Year 2002.

#### **ILLINOIS**

Upper Mississippi and Illinois 62,767,000  $\frac{17}{2}$  57,464,000 1,579,000 3,724,000  $0^{-\frac{17}{2}}$  Navigation Study, IL, IA, MN, MO, & WI Rock Island District

The Upper Mississippi and Illinois Navigation Study is addressing the need for navigation improvements on the Upper Mississippi River and the Illinois Waterway. The area includes 854 miles of the Upper Mississippi River, with 29 locks and dams between Minneapolis-St. Paul, Minnesota, and the mouth of the Ohio River, and 348 miles of the Illinois Waterway, with eight locks and dams which connects the city of Chicago, Illinois, and the Great Lakes with the Mississippi River just upstream from the Melvin Price Locks and Dams. The system is experiencing delays to commercial traffic at locks upstream from Melvin Price Locks and Dams due to limited lockage capacity and increasing traffic. Reconnaissance studies indicated that navigation improvements at certain locks on the Mississippi River and Illinois Waterway might be economically justified. The feasibility report will include a recommendation regarding needs for navigation improvements on the Upper Mississippi and Illinois Waterway system for the 50-year planning horizon. In recognition of the national significance of the environmental value of both waterways, the environmental impact statement will encompass system-wide and limited cumulative impacts. The feasibility study report will recommend the implementation of system investments, including the identification of the costs of required mitigation of environmental impacts.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. Fiscal Year 2002 funds will be used to continue the feasibility phase of the study.

The reconnaissance phase was completed in March 1993. The feasibility study completion date is being determined.

Total - Project Review Studies:	62,767,000	57,464,000	1,579,000	3,724,000	0
TOTAL SURVEYS	140,655,000	71,392,000	9,435,000	12,055,000	47,773,000

A revised project study plan is being prepared to address issues identified during recent independent reviews, including National Research Council's conclusions that the models, data, and assumptions need improvement.

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Project	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
	\$	\$	\$	\$	\$

- 3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) NEW: None.
- 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) CONTINUING
  - a. Watershed/Ecosystem: The amount of \$515,000 is requested to initiate one and continue one PED activity in Fiscal Year 2002.

**ILLINOIS** 

Peoria Riverfront Development, IL 1,665,000 0 0 415,000 1,250,000 Rock Island District

Peoria, Illinois, is located on the Illinois River in Peoria County. The study area includes the portion of the Illinois River and its tributaries that flows next to, or directly impacts, the downtown Peoria Riverfront Development project. This stretch of river, a riverine lake called Peoria Lake, has lost roughly 70% of its volume with depths reduced from approximately 8 feet to 2.5 feet since 1903. This loss of depth has seriously impacted fish and wildlife. Contributing to the filling is sediment deposition from creeks draining into the Illinois River. A system feasibility report addressing possible lake and tributary restoration alternatives is scheduled for completion in March 2002. PED will ultimately be cost shared 65/35 with the State of Illinois, Department of Natural Resources, and/or other willing sponsors, but will be financed through the PED period at 75/25. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Fiscal Year 2002 funds will be used initiate the PED. The completion date for the PED phase is being determined.

A summary of the study cost sharing is as follows:

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$2,220,000	Engineering and Design Costs	\$2,220,000
Initial Federal Share	1,665,000	Ultimate Federal Share	1,443,000
Initial Non-Federal Share	555,000	Ultimate Non-Federal Share	777,000

The project is not authorized for construction. Fiscal Year 2001 funds are being used to continue work on the feasibility study.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
MINNESOTA					
Lower St. Anthony Falls Rapids Restoration, Minnesota St. Paul District	1,000,000	0	300,000 <sup>1</sup>	100,000	600,000

St. Anthony Falls restoration would include development of a formal whitewater rapids channel and trail/park on the east bank of the Mississippi River, adjacent to the U.S. Army Corps of Engineers Lower St. Anthony Falls Lock and Dam, within the City of Minneapolis, Hennepin County. The facility would utilize the vertical drop created by the dam and include a new river channel approximately 2,000 feet long and 40 feet wide, with a vertical drop of 25 feet. The channel would flow parallel to the Mississippi River main stem in a park setting. The facility would include a recreational whitewater course for kayaking, canoeing and rafting as well as improved public access to the river and formal shore fishing opportunities. The project is estimated to cost \$15,400,000 with an estimated Federal cost of \$10,000,000 and an estimated non-Federal cost of \$5,400,000. The project is described in the report entitled "Feasibility Study for Mississippi Whitewater Park, Minneapolis, Minnesota," prepared for the State of Minnesota Department of Natural Resources, dated June 30, 1999. Initial preconstruction engineering and design activities will include validation of the State report with economic and environmental analyses.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,333,000	Engineering and Design Costs	\$1,333,000
Initial Federal Share	1,000,000	Ultimate Federal Share	866,000
Initial Non-Federal Share	333,000	Ultimate Non-Federal Share	467,000

The project is authorized for construction by Section 527 of the Water Resources Development Act of 2000. The authorizing legislation stipulated that the Non-Federal share of the cost of the project would be 35 percent. Fiscal Year 2001 funds are being used to execute a design agreement and initiate preparation of an Engineering Documentation Report. Fiscal Year 2002 funds will be used to continue the engineering Documentation Report. The completion schedule for preconstruction engineering and design is being determined.

Total Watershed/Ecosystem	2,665,000	0	300,000	515,000	1,850,000

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<sup>&</sup>lt;sup>1</sup> An additional \$598,000 was appropriated in the Consolidated Appropriations Act, 2001, for a cost-shared feasibility study. Legislation will be required prior to using this \$598,000 for PED.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
b. Navigation: The amount of \$\$584,0	000 is requested to initiate one and o	continue one PED activ	ity in Fiscal Year 2002.		
LOUISIANA					
Bayou Sorrel Lock, LA	1,500,000	0	0	300,000	1,200,000

Bayou Sorrel Lock is a feature of the Atchafalaya Basin project, which is a feature of the Flood Control, Mississippi River and Tributaries project. The project flood flow line for the Atchafalaya Basin was modified in 1986 to the current elevation of 28.7. The lock must be modified or replaced. The need to modify Bayou Sorrel Lock presents an opportunity to address increasing navigation concerns at this lock. Planning, engineering, and design of the modification or replacement for flood reduction benefits were delayed until the optimum navigation plan could be studied. The tentative plan is the replacement of the existing lock with a new 110 by 1,200 feet concrete chamber lock immediately adjacent to the existing lock. Preconstruction engineering and design cost would be all Federal.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,500,000	Engineering and Design Costs	\$1,500,000	
Initial Federal Share	1,500,000	Ultimate Federal Share	1,500,000	
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0	

The project is not authorized for construction. Fiscal Year 2001 funds are being used to complete the feasibility phase in September 2001. Fiscal Year 2002 funds will be used to initiate PED. The completion date for the PED phase is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
MISSOURI					
St. Louis Harbor, MO & IL St. Louis District	4,590,000	3,211,000	199,000	284,000	896,000

The Port of Metropolitan St. Louis has grown to be one of the Nation's leading inland ports; however, the port has a shortage of riverfront sites suitable for waterway dependent industrial use. In view of projected long-term growth in waterborne commerce moving through the St. Louis market, additional harbor facilities are needed. The authorized project has a St. Louis Municipal Dock sediment control structure and a 6,900-foot harbor along the Chain of Rocks Canal in Illinois. The Chief of Engineer's Report dated April 30, 1984 reflected a total cost of \$31,000,000, with an estimated first Federal cost of \$10,400,000 and an estimated first non-Federal cost of \$20,600,000. The current project cost, without an allowance for inflation through the construction period, is \$46,148,000 (\$15,524,000 Federal and \$30,624,000 non-Federal) at October 1999 price levels. A general reevaluation study is currently underway to determine if the project is incrementally feasible. The plan includes a limited reevaluation as directed by Section 415 of the Water Resources Development Act of 1996. The limited reevaluation will determine the feasibility of reducing interior flooding at the Illinois site. The current project formulation eliminates the sediment control structure at the St. Louis Municipal Dock and indicates a reduced harbor length along the Chain of Rocks Canal. The reevaluation will determine the economic feasibility of a harbor with dimensions between 2,000 feet and 3,500 feet long at an estimated cost of \$20,000,000. Updated project cost and economic data will be included in the General Reevaluation Report. The Tri-City Regional Port District is the local sponsor for the project and has expressed support for the project. The sponsor understands the financing and cost-sharing requirements and is ready to sign a design agreement. PED will ultimately be cost shared at the rate for the project to be constructed but PED costs required after completion of the reevaluation will be financed through the PED period at 25 perce

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,600,000 <sup>1</sup>	Engineering and Design Costs	\$1,600,000	1
Initial Federal Share	1,200,000	Ultimate Federal Share	1,280,000	
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	320,000	

<sup>&</sup>lt;sup>1</sup> Excludes PED expenditures prior to Fiscal Year 1996 and the cost of reevaluation report being completed with PED funds.

The project was authorized for construction by the Water Resources Development Act of 1986. The cost sharing for construction will be 80 percent Federal and 20 percent non-Federal in accordance with the Water Resources Development Act of 1986. Fiscal Year 2001 funds are being used to complete the General Reevaluation Report, including engineering, economic, and environmental analyses, and continue PED. Fiscal Year 2002 funds will be used to continue PED. The PED completion date is being determined.

Total - Navigation	6 090 000	3 211 000	199 000	584 000	2 096 000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Project	Federal Cost	FY 2001	FY 2001	FY 2002	After FY 2002
	\$	\$	\$	\$	\$

- c. Beach Erosion Control: None.
- d. Flood Control: The amount of \$ 2,846,000 is requested to initiate two, continue six, and complete one PED activity in Fiscal Year 2002.

**ILLINOIS** 

Wood River Levee, IL 1,200,000 173,000 232,000 341,000 454,000 St. Louis District

The project area is located in the Mississippi River flood plain of Madison County, Illinois, just upstream of the City of St. Louis. The area is protected by an urban design levee, authorized in 1938 and constructed in the 1950's. Based on the Reconnaissance Report dated April 1999, preconstruction engineering and design is being resumed to initiate a cost-shared reconstruction evaluation to address the aging infrastructure and determine its applicability as a Federal interest. The recommended project, estimated to cost \$25,000,000 with an estimated Federal cost of \$18,750,000 and an estimated non-Federal cost of \$6,250,000 includes rehabilitation of the levee system to bring it into original performance compliance. The reevaluation will investigate the reconstruction or replacement of 7 pump stations, 37 gravity drains, 147 relief wells, and over 21 miles of levee. In response to a system failure during the flood of 1993, only swift action by Wood River Drainage and Levee District prevented major damages. On 6 April 2000 a Preconstruction Engineering and Design Agreement (PED) was executed with the Wood River Drainage and Levee District. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,600,000	Engineering and Design Costs	\$1,600,000	
Initial Federal Share	1,200,000	Ultimate Federal Share	1,200,000	
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	400,000	

The project is authorized for construction by the Flood Control Act of 1938. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with Section 103 of the Water Resources Development Act of 1986. Fiscal Year 2001 funds are being utilized to continue the reconstruction evaluation. Fiscal Year 2002 funds will be used to continue the reconstruction evaluation. The completion date for PED is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
LOUISIANA					
Jefferson Parish, LA	1,500,000	0	68,000	50,000	1,382,000

Jefferson Parish is located along the Mississippi River in southeast Louisiana. The parish is part of the major urban center in the New Orleans Metropolitan Statistical Area. Jefferson Parish has a population of 448,300 (1990). The study area is relatively flat and divided into three hydraulically independent areas. Most of the developed areas are protected by levee systems from river and hurricane flooding and drained by pumps which discharge primarily into estuarine water bodies such as Lake Pontchartrain and Barataria Bay. The leveed areas are divided by natural and man-made barriers into many sub-basins which are webbed with drainage canals which terminate at pumping stations. Heavy rainfall has produced major floods in Jefferson Parish in six of the last 12 years. Between 1977 and 1986, 22,000 claims amounting to \$122,000,000 were filed with the Federal Emergency Management Agency. In April 1980, May 1980, April 1983, November 1989, and May 1995, Jefferson Parish was declared a Federal disaster area due to extensive rainfall flooding. Local interests have made substantial improvements to the flood control systems but have not kept pace with the increasing severity of the problem. The feasibility study is addressing potential solutions to flood damages. Possible alternative solutions to the flooding problems include: canal improvements, removal of canal obstructions, and increased pumping capacities. The disastrous flood event in May 1995 prompted a Congressional Directive to expedite construction of the economically justified components identified in the reconnaissance report. Subsequent to the authorization of the Southeast Louisiana project, the Jefferson Parish study scope was reevaluated, resulting in a revised cost estimate and a revised completion date. The average annual benefits and the benefit-cost ratio are yet to be determined. The local sponsor, Jefferson Parish, is fully committed to cost sharing in the project. PED will ultimately be cost shared at the rate for the project to be constructed,

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$2,000,000	Engineering and Design Costs	\$2,000,000	
Initial Federal Share	1,500,000	Ultimate Federal Share	1,300,000	
Initial Non-Federal Share	500,000	Ultimate Non-Federal Share	700,000	

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2001 funds are being used to initiate the PED phase. Fiscal Year 2002 funds will be used to continue PED. The completion date of the PED phase is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Lafayette Parish, LA New Orleans District	750,000	0	0	400,000	350,000

Lafayette Parish is located along the Vermilion River in southwest Louisiana. The study area encompasses the flood prone areas of Lafayette Parish in the Vermilion River Basin as well as areas of St. Martin Parish near the Bayou Tortue Swamp. The majority of structures susceptible to flood damages are located along the Vermilion River corridor within and adjacent to the city limits of Lafayette. The Vermilion River is the major drainage artery for the study area and has an estimated drainage area of 561 square miles. Significant floods have occurred in Lafayette Parish in 1922, 1927, 1940, 1946, 1953, 1955, 1959, 1961, 1964, 1966, 1969, 1971, 1980, 1985, 1991, 1993, and 1995. Since 1978 approximately 1,000 claims were reported for the communities in Lafayette Parish at a cost exceeding \$5,000,000. Additionally, over 160 repetitive loss claims have been reported to the National Flood Insurance Program since 1978. A feasibility eport is being conducted to reduce flood damages in Lafayette Parish. The anticipated solution is expected to consist of dredging the Vermilion River, retention facilities, and non-structural alternatives. The average annual benefits and the benefit-cost ratio are yet to be determined. The total project cost is expected to be approximately \$80,000,000. The Lafayette Parish government has indicated a willingness to support such efforts and take on the responsibilities required of a non-Federal cost-sharing sponsor. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost-sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,000,000	Engineering and Design Costs	\$1,000,000	
Initial Federal Share	750,000	Ultimate Federal Share	650,000	
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000	

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Non-Federal funds are being used to complete Fiscal Year 2001 feasibility efforts. The funds requested in Fiscal Year 2002 will be used to initiate the PED phase. The completion date for PED is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Orleans Parish, LA New Orleans District	750,000	0	0	50,000	700,000

Orleans Parish is located along the Mississippi River in southeast Louisiana. The parish is part of the major urban center in the New Orleans Metropolitan Statistical Area. Orleans Parish has a population of 497,000 (1990). The Mississippi River bisects the area creating an east bank and west bank basin. Most of the developed areas are protected by levees from river and hurricane flooding and drained by pumps, which discharge primarily into estuarine water bodies such as Lakes Pontchartrain and Borgne. The leveed areas are divided into many sub-basins by natural and man-made barriers. In April 1980, May 1980, April 1983, November 1989, and May 1995, Orleans Parish was declared a Federal disaster area due to excessive rainfall flooding. The disastrous flood event in May 1995 prompted a Congressional Directive for the Corps to expedite construction of the economically justified projects identified in the reconnaissance report for the Southeast Louisiana area. The feasibility study scope of work was revised based on the Southeast Louisiana project to address areas that continue to experience damage due to flooding. The alternatives designed for both the east bank and west bank of Orleans Parish consist of a system of culverts, canals, and pump stations. The recommended project is estimated to cost \$95,000,000 (\$61,800,000 Federal and \$33,200,000 non-Federal). The average annual benefits and the benefit-cost ratio are yet to be determined. The local sponsor, the New Orleans Sewerage and Water Board, is fully committed to cost-share the project. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,000,000	Engineering and Design Costs	\$1,000,000	
Initial Federal Share	750,000	Ultimate Federal Share	650,000	
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000	

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Non-Federal funds are being used to complete Fiscal Year 2001 feasibility efforts. The funds requested in Fiscal Year 2002 will be used to initiate PED. The completion date of the PED phase is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
MISSOURI					
Chesterfield, MO	1,875,000	0	134,000	605,000	1,136,000

The Missouri River drains an area of about 525,000 square miles and empties into the Mississippi River approximately 15 miles upstream of St. Louis, Missouri. The Monarch-Chesterfield Levee is located along the right bank of the Missouri River between river miles 46.0 and 38.5. The length of the existing 100-year private levee system is 11.5 miles and protects approximately 4,240 acres. During the Great Flood of 1993, the existing levee failed causing flood damages and other costs such as flood fighting cost, moving expenses, lost wages, lease value differentials, and lost business profits in excess of \$200,000,000. The project is estimated to cost \$58,090,000 with an estimated Federal cost of \$37,759,000 and an estimated non-Federal cost of \$20,331,000 at October 2000 price levels. The project includes constructing 11.5 miles of approximately 1.5 to 7.0 feet of levee raise along the Missouri River and Bonhomme Creek with attendant seepage control structures, including 9 relief wells, a sheet pile cutoff, and seepage berms 150 to 300 feet wide and 4 to 15 feet thick. The plan also includes constructing a railroad closure and gate well structure, a road raise at Centaur Road, a Howell Island borrow site access road, an Eatherton Road Realignment, and Eatherton Road-Olive Road ramp crossing, an alternate alignment upstream and downstream of Daniel Boone Bridge, a Chesterfield Airport road closure structure with retaining walls, a Long Road roadway and railroad closure structures with retaining walls, ramping of various farm roads crossing the levee, four pumping stations with gravity drains, and various utility relocations. The plan also includes constructing 6.82 acres of forested wetlands, 3.73 acres of open water, and 2.39 acres of emergent wetlands for environmental mitigation. The local sponsor has submitted and received approval from Assistant Secretary of the Army (Civil Works), three credit applications for work: 1) construction of three pump stations within the protected area, 2) levee improvement from Centaur Road to Interstate 64/U.S. 40, and 3) realignment of levee near Boone's Crossing interchange and levee improvement along the left bank of Bonhomme Creek. The average annual benefits amount to \$4.4 million, all for flood damage reduction. The benefit-cost ratio is 1.97 to 1 based upon the latest economic analysis dated October 2000. The Monarch-Chesterfield Levee District is the local sponsor for the project. A design agreement, including a detailed PED cost estimate and schedule, is in preparation with PED scheduled to start in May 2001. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$2,500,000	Engineering and Design Costs	\$2,500,000
Initial Federal Share	1,875,000	Ultimate Federal Share	1,625,000
Initial Non-Federal Share	625.000	Ultimate Non-Federal Share	875.000

The Water Resources Development Act of 2000 authorized the project for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2001 funds are being utilized to complete the feasibility phase of the study and initiate PED. The funds requested for Fiscal Year 2002 will be used to continue PED. The completion date for PED is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
River des Peres, MO St. Louis District	3,867,000	1,008,000	247,000	242,000	2,370,000

River des Peres drains a 111-square mile area in the city of St. Louis and St. Louis County, Missouri, and empties into the Mississippi River. The floodplain encompasses about 7,500 acres of mostly urban development. The authorized project consists of two subprojects--Deer Creek and University City. The maximum flood of record occurred in 1957; property damages would have totaled \$12,300,000 in October 1989 dollars and development conditions. The estimated project cost at October 1992 price levels totaled \$23,500,000 with an estimated Federal cost of \$17,400,000 and an estimated non-Federal cost of \$6,100,000. Current financial and economic data are unavailable for each of the subprojects. The Deer Creek portion of the project consists of 2.5 miles of channel widening and stabilization improvements through the cities of Rock Hill, Webster Groves, Brentwood, and Maplewood. The majority of structures affected by Deer Creek flooding are commercial, including manufacturing, two industrial parks, warehousing and distribution structures, and retail shops. Residential structures are also flooded. A 100-year flood would affect 162 units in the Deer Creek portion of the project area. The project was deferred in the preconstruction engineering and design (PED) phase when the original sponsor, the Metropolitan St. Louis Sewer District, was unable to continue as the sponsor. The Metropolitan St. Louis Sewer District and the mayors of Brentwood, Rock Hill, Webster Groves, and Maplewood signed a letter of intent in February 1999 to serve as the local sponsors for the Deer Creek portion of the project. The University City portion of the project consists of channel enlargement and stabilization along about 2.5 miles of the University City branch of upper River des Peres, a recreation trail of 2.53 miles within the improved channel right-of-way, and a small recreation park to be constructed by non-Federal interests on non-project lands. The Metropolitan St. Louis Sewer District and the city of University City signed a letter of intent in February 2001. PED will ultimately be cost shared at the rate for these projects to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustment that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction. The sponsors of both subprojects understand the financing and cost sharing policy for PED and are willing to cost share the PED phase.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$5,156,000	Engineering and Design Costs	\$5,156,000
Initial Federal Share	3,867,000	Ultimate Federal Share	3,867,000
Initial Non-Federal Share	1,289,000	Ultimate Non-Federal Share	1,289,000

The Water Resources Development Act of 1990 authorizes the project for construction. The cost sharing for construction of the project will be 75 percent Federal and 25 percent non-Federal in accordance with the Water Resources Development Act of 1986. Fiscal Year 2001 funds are being used to continue the reevaluation of the Deer Creek portion and initiate the University City portion of the project. The funds requested for Fiscal Year 2002 will be used to continue the reevaluation of both portions. The completion date for PED is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
St. Louis Flood Protection, MO St. Louis District	1,684,000	295,000	294,000	98,000	997,000

The St. Louis Flood Protection project area is located in St. Louis, Missouri, on the right bank of the Mississippi River between miles 176.3 and 187.2 above the mouth of the Ohio River. Approximately 3,160 acres of industrial and commercial development are protected from Mississippi River flooding by the completed St. Louis Flood Protection Project. During the Great Flood of 1993, which was less than the project's design, a short section of the project failed and only quick, extensive emergency actions by the City of St. Louis, Metropolitan St. Louis Sewer District, and Corps of Engineers prevented a large portion of the City of St. Louis from flooding. Significant potential problems identified with the project during 1993 include under seepage, foundation piping (which caused the failure in 1993), insufficient freeboard, pipe crossing, and toe drains and relief wells. Based on the Reconnaissance Report dated February 1999, preconstruction engineering and design is being resumed to initiate a cost-shared reconstruction evaluation to determine the Federal interest in correcting design or construction deficiencies. The recommended project, estimated to cost \$8,000,000 with an estimated Federal cost of \$6,000,000 and an estimated non-Federal cost of \$2,000,000, includes correcting structural deficiencies, correcting geotechnical concerns, and enhancing recreation features within the project area. The City of St. Louis signed the Preconstruction Engineering and Design Agreement on 2 February 2000. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$2,245,000	Engineering and Design Costs	\$2,245,000	
Initial Federal Share	1,684,000	Ultimate Federal Share	1,684,000	
Initial Non-Federal Share	561,000	Ultimate Non-Federal Share	561,000	

The project is authorized for construction by Public Law 84-256, 9 August 1955. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with Section 103 of the Water Resources Development Act of 1986. Fiscal Year 2001 funds are being utilized to prepare a Reconstruction Evaluation Report. The funds requested in Fiscal Year 2002 will be used to continue the Reconstruction Evaluation Report. The completion date for PED is being determined.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
NORTH DAKOTA					
Devils Lake, ND St. Paul District	7,700,000	2,000,000	4,000,000	1,700,000	0

Devils Lake is located in northeastern North Dakota. Communities located on the lake include the City of Devils Lake (1990 population 7,782), the Spirit Lake Nation Indian Reservation, and the City of Minnewaukan. Camp Grafton, a National Guard training facility, is also located on the lakeshore. The lake has no natural outlet except at extremely high lake levels. The lake's levels have fluctuated widely throughout history and have risen approximately 25 feet since 1993, inundating much of the surrounding area; if the lake were to rise 13 feet it would flow into the Sheyenne River in the vicinity of Tolna, North Dakota. Problems caused by the recent high water include transportation, urban, and lakeshore flood damages and water quality. Over \$500 million in potential flood damages are at risk between the present lake level and the natural overflow elevation. The objective of the proposed project is to reduce the flood damages related to the rising lake levels in the flood-prone areas around Devils Lake and to reduce the potential for a natural overflow event. The North Dakota State Water Commission is the local sponsor and has demonstrated very strong support for the project. Preconstruction Engineering and Design (PED) funds were first provided in the Supplemental Appropriations and Rescissions Act, 1997, under the Flood Control and Coastal Emergencies account. That Act directed the Corps to initiate and complete PED, and the conference report associated with the Act directed that the policy of requiring concurrent non-Federal financing of PED shall not apply. PED ultimately will be cost shared at 35 percent non-Federal. Adjustments necessary to bring the non-Federal contribution in line with 35 percent project cost sharing will be accomplished in the first year of construction.

Total Estimated PED Costs	\$7,700,000	Total Estimated PED Costs	\$7,700,000
Initial Federal Share	7,700,000	Ultimate Federal Share	5,005,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	2,695,000

Fiscal Year 2001 funds are being used to continue PED activities including data collection and alternatives evaluation. The funds requested for Fiscal Year 2002 will be used to continue PED. The PED is scheduled for completion in October 2002.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2001 \$	Allocation FY 2001 \$	Tentative Allocation FY 2002 \$	Additional to Complete After FY 2002 \$
Grafton, Park River, ND St. Paul District	1,000,000	100,000	840,000	60,000	0

The city of Grafton is located in Walsh County in northeastern North Dakota along the Park River where State Highway 81 and the Park River intersect approximately 340 miles northwest of Minneapolis – St. Paul, Minnesota. The recommended plan will provide flood protection for the city of Grafton; it consists of a 3.75-mile-long bypass channel that would extend upstream and to the west of Grafton along the South Branch Park River. The tieback levee will direct the flood flows to the inlet of the bypass channel. A diversion structure will be constructed at the point where the levee crosses the Park River. River flows that exceed 2,000 cubic feet per second (cfs) will be diverted through the proposed bypass channel. The project is estimated to cost \$30,000,000 with an estimated Federal cost of \$19,500,000 and an estimated non-Federal cost of \$10,500,000. The city of Grafton is the local sponsor. The mayor and City Council of Grafton have demonstrated a very strong support for the project. Preconstruction Engineering and Design (PED) will ultimately be cost shared at 35 percent, but will be financed through the PED period at 25 percent. Adjustments necessary to bring the non-Federal contribution in line with 35 percent project cost sharing will be accomplished in the first year of construction.

Total Estimated PED Costs	\$1,333,000	Total Estimated PED Costs	\$1,333,000
Initial Federal Share	1,000,000	Ultimate Federal Share	866,000
Initial Non-Federal Share	333,000	Ultimate Non-Federal Share	467,000

The Water Resources Development Act of 1986 authorized construction of the Grafton project; project was subsequently deauthorized on 18 November 1991. The Water Resources Development Act of 1999 reauthorized the project for construction subject to a favorable reanalysis of project costs and benefits. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, local interests will be required to provide lands, easements, rights-of-way, and borrow and excavated or dredged material or disposal areas; modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project; pay five percent of the costs allocated to flood control; contribute an additional amount in cash as necessary to bring the non-Federal share of costs allocated to flood control to a minimum 35 percent; and bear all costs of operation, maintenance, and replacement of the flood control facilities.

Fiscal Year 2001 funds are being used to continue preparation of a General Reevaluation Report. The funds requested in Fiscal Year 2002 will be used to complete a General Reevaluation Report and the plans and specifications for the first stage of construction. The completion schedule for preconstruction engineering and design is December 2001.

Total - Flood Control	20,326,000	3,576,000	5,815,000	3,546,000	7,389,000
TOTAL - PED	29,081,000	6,787,000	6,314,000	4,645,000	11,335,000
GRAND TOTAL - SURVEYS AND PED	169,736,000	78,179,000	15,749,000	16,700,000	59,108,000

APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Chain of Rocks Canal, Illinois (Continuing Deficiency Correction)

LOCATION: The Chain of Rocks Canal is located on the Mississippi River adjacent to river miles 184 to 194.4 in Madison County, Illinois.

DESCRIPTION: The recommended plan for design deficiency correction involves the installation of relief wells and construction of berms and a pump station. All work is programmed.

AUTHORIZATION: The original project was authorized by the River and Harbor Act of 2 March 1945.

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 7 3/8 percent (FY 1999).

BASIS OF BENEFIT-COST RATIO: Based on the Chain of Rocks Design Deficiency Report dated July 1997 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA				STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
				Entire Project	10	Being determined
	Original Pro	ect				
				PHYSICAL DATA		
Actual Federal Cost			\$59,260,000			
				The proposed plan provides for corre	ecting underseepage	e deficiencies on
Actual Non-Federal Cost			0	the nine-mile long levee, installing 30		
Cash Contributions	\$	0	· ·	nonfunctional relief wells, utility reloc		
Other Costs	Ψ	0		adding fill to berms and filling in low		
Other Costs		U				a 232 dis pullip
			<b>A=</b> 0.000.000	station, and constructing wetland m	itigation features.	
Total Original Project Cost			\$59,260,000			

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FED COST
(Remedial Work Only)

#### Remedial Work

Estimated Federal Cost			\$24,756,000	
Estimated Non-Federal Cost Cash Contributions Other Costs	\$	0	0	
Total Estimated Remedial Cost			\$24,756,000	
Total Estimated Project Cost			\$84,016,000	
Allocations to 30 September 2000 Conference Allowance for FY 2001 Allocation for FY 2001 Allocations through FY 2001 Allocation Requested for FY 2002 Programmed Balance to Complete after FY 2002 Unprogrammed Balance to Complete after FY 2002	02		-,,	16 30

JUSTIFICATION: The Chain of Rocks Canal Levee System consists of a dual line of levees running parallel to the canal constructed as part of the Chain of Rocks Canal, Illinois, navigation project. The operation and maintenance of these levees is a 100 percent Federal responsibility. The eastern line of this levee system serves as an integral part of the main line levee protection to the East St. Louis and vicinity area. The east levee has demonstrated inadequate underseepage performance during past floods. Quick conditions and sand boils develop on the landside of the levee during high river stages. The original design assumptions related to the coefficients of permeability for the aquifer and top stratum materials were incorrect. The relief well system was found to be deficient. The levee relies on the impoundment of water against the landside toe of the levee in order to maintain levee stability; however, development over the last 40 years has prevented effective use of this method. Correction of the deficiencies will assure the integrity of the levee system and provide urban level protection for the East St. Louis metropolitan area. The average annual benefits for the design deficiency correction, all flood control, are \$2,647,000.

Mississippi Valley Division

St. Louis District

Chain of Rocks, Illinois

3 April 2001

40

<sup>&</sup>lt;sup>1</sup> Reflects \$336,000 reduction assigned as savings and slippage; \$75,000 reprogrammed to the project; and \$4,000 rescinded from the project in accordance with the Consolidated Appropriations Act, 2001.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Initiate: Pump Station	\$ 300,000
Relocations	120,000
Berms, North Contract	1,767,000
Lands and Damages	50,000
Continue: Wetland Mitigation	200,000
Relief Wells	700,000
Planning, Engineering, and Design	260,000
Supervision and Administration	220,000
T 4 1	0.047.000
Total	3,617,000

NON-FEDERAL COST: The project is 100 percent Federal.

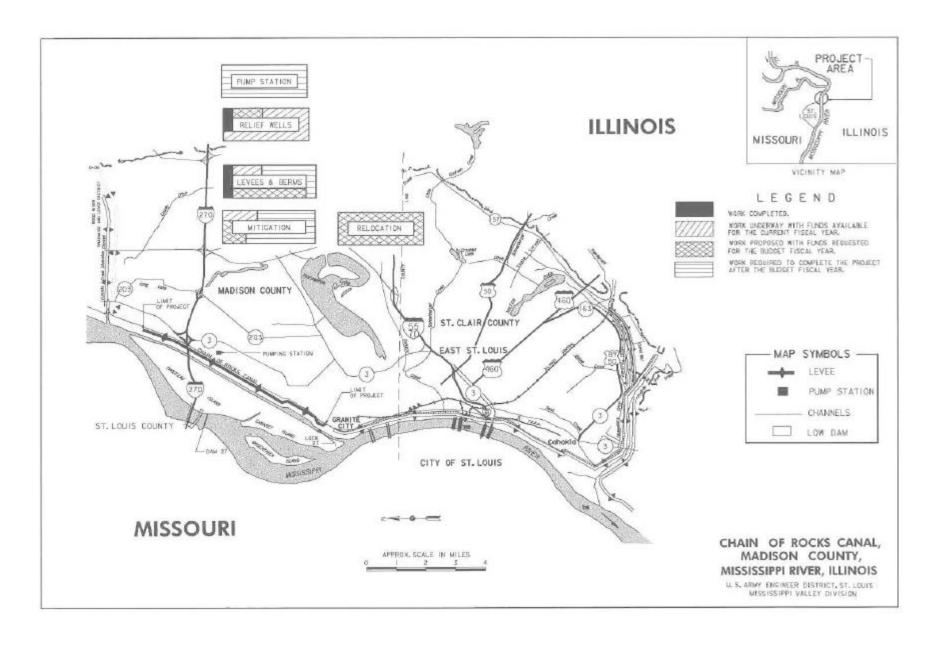
STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$24,756,000 is an increase of \$1,028,000 from the latest estimate (\$23,728,000) presented to Congress (FY 2001). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ -470,000 1,498,000
Total	\$1 028 000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment resulted in a Finding of No Significant Impact (FONSI), which was signed 21 May 1996.

OTHER INFORMATION: Previous funding included the actual cost of \$59,260,000 for the construction of the original project, which was completed in FY 1953. Funds to initiate construction for the remedial work were appropriated in FY 1999. The Corps is seeking a permanent easement of 72 acres within the Charles Melvin Price Support Center, a closing army base, for construction and operational purposes associated with the original project and the deficiency corrections. Fish and Wildlife costs are \$1,175,000.



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Mississippi River-Gulf Outlet, Louisiana (Continuing)

LOCATION: The project is located in the southeastern portion of Louisiana in Orleans, Plaquemines and St. Bernard Parishes, east of the Mississippi River. It is a deep draft seaway canal extending for approximately 76 miles from the junction of the IHNC and the GIWW in New Orleans, LA to the 38- foot contour in the Gulf of Mexico.

DESCRIPTION: The plan of improvement consists of four basic items: (1) a completed channel extending from the Inner Harbor Navigation Canal to the minus 38-foot contour in the Gulf of Mexico; (2) completed jetties and dikes along the channel in Breton Sound; (3) foreshore protection along the north and south side of the ship channel extending from the Inner Harbor Navigation Canal to the end of the hurricane protection levee. Foreshore protection is completed along the south bank, east of Bayou Bienvenue to the end of the Hurricane protection levee, and, west of Bayou Bienvenue to the intersection of the MRGO and GIWW. Completion of remaining foreshore protection along the MRGO is unprogrammed until need arises. A reevaluation study focusing on the deep draft navigation aspects of the project and the desirability/need for continued maintenance is programmed. This effort covers the navigation aspects of the potential modification of the project, as well as the environmental and flood control aspects.

AUTHORIZATION: River and Harbor Act of 1956, Water Resources Development Acts of 1976, 1986, and 1996.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT - COST RATIO: 3.6 to 1 at 2-5/8 percent.

INITIAL BENEFIT - COST RATIO: 1.6 to 1 at 2-5/8 percent (Fiscal Year 1961).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available draft evaluation report submitted in April 1982. A Reevaluation study to determine if the existing channel should be modified and the advisability of continuing its operation is scheduled for completion in September 2002.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2001)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction Unprogrammed Construction	82,265,000 9,924,000	\$ 92,189,000		MRGO Reevaluation Study Entire Project	88 0 88	Being determined <sup>1</sup> Being determined Being determined
Estimated Non-Federal Cost Programmed Construction Cash Contributions 0 Other Cost 8,811,000	8,811,000	8,811,000				
Total Estimated Programmed Construction Cost Total Estimated Unprogrammed Construction Co Total Estimated Project Cost		\$ 91,076,000 9,924,000 \$101,000,000				
Allocations to 30 September 2000 Conference Allowance for FY 2001 Allocation for FY 2001 Allocations through FY 2001		\$ 80,765,000 500,000 419,000 81,184,000	<sup>2</sup> 88			
Allocation Requested for FY 2002 Programmed Balance to Complete After FY 200 Unprogrammed Balance to Complete After FY 2		500,000 \$ 581,000 \$ 9,924,000	89			

3 April 2001

<sup>&</sup>lt;sup>1</sup> Schedule for completion of foreshore protection is indefinite until need arises. <sup>2</sup> Reflects \$80,000 reduction assigned as savings and slippage, and \$1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

### PHYSICAL DATA

#### Channels:

Channel, 36 feet deep by 500 feet wide from Inner Harbor Navigation Canal to Chandeleur Islands; 66 miles.

Channel, 36 feet deep by 500 feet wide from Mississippi River to the Gulf Outlet.

Eased Entrance Channel widens gradually from 500 feet at Chandeleur Islands to 600 feet at the 38 foot contour in the Gulf of Mexico; 9.38 miles.

Turning basin, vicinity of Inner Harbor Navigation Canal.

Dikes in Breton Sound:

Northeast Retention Dike to Mile 20.2 Southwest Retention Dike to Mile 14.8

JUSTIFICATION: New Orleans is the gateway to the great system of inland waterways of the central valley of the nation. Adequate outlets to the Gulf of Mexico are essential to provide economical transportation to this area. The project provides an additional outlet to the Gulf that is shorter than the Mississippi River route and one which is not subject to as large stage fluctuations as is the river. The improvement provides a tidewater outlet and harbor sufficiently spacious for dispersion of docks and cargo-handling facilities, thus permitting flexible operations of the inland and seagoing commerce which is utilizing the river, the tidewater canal, and the Gulf Intracoastal Waterway. The project provides savings in sailing time and ship turnaround time, reduction in navigation hazards, and relief from congestion. A reevaluation study to determine if the existing channel should be modified and the advisability of continuing its operation is scheduled for completion in September 2002.

Fiscal Year 2002: The requested amount will be applied as follows:

Planning, Engineering and Design \$500,000

Total \$500,000

STATUS OF LOCAL COOPERATION: Assurances of local cooperation furnished by the Board of Commissioners of the Port of New Orleans were accepted on behalf of the United States on 29 August 1957. The Board of Commissioners executed amended assurances covering the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, which were accepted on behalf of the United States on 21 April 1975.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate \$92,189,000 is an increase of \$2,189,000 from the estimate \$90,000,000 presented to Congress (FY 1999). This change includes the following items:

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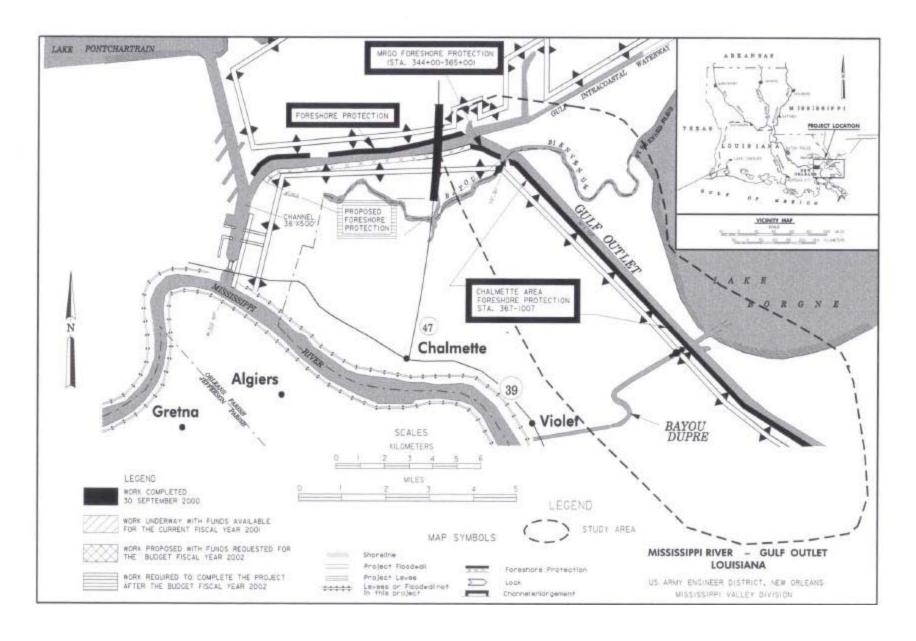
I I LIVI	AMOONT		
Price Escalation on Construction Features Authorized Modifications	\$ 189,000 2,000,000		
Total	\$2,189,000		

ITEM/

STATUS OF ENVIRONMENTAL IMPACT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 14 May 1976, and published in the Federal Register on 21 May 1976. An Environmental Impact Statement will be prepared as a result of the reevaluation study.

OTHER IMFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1957 and funds to initiate construction were appropriated in Fiscal year 1958.

Project authorization provided for the construction of a seaway canal 36 feet deep and 500 feet wide extending 70 miles as a land and water cut from a point south of the Intracoastal Waterway at Michoud south-easterly to Chandeleur Island, thence gradually increasing to a width of 600 feet and a depth of 38 feet in the Gulf of Mexico, with protective jetties at the entrance, a permanent retention dike through Chandeleur Sound and a wing dike along Breton Island as required. A turning basin was constructed at the landward end of the seaway canal, 36 feet deep, 1000 feet wide and 2000 feet long with a connecting channel 36 feet deep and 500 feet wide extending westerly along the Gulf Intracoastal Waterway from the turning basin to the Industrial Canal.



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana (Continuing)

LOCATION: The project is located in the southeast portion of Louisiana below Baton Rouge, in the parishes of Ascension, Assumption, St. James, St. Charles, Orleans, Lafourche, Jefferson, Plaquemines, St. Bernard, and St. John the Baptist, consisting of the Mississippi River and its major outlet to the Gulf of Mexico, Southwest Pass.

DESCRIPTION: The authorized project will provide more efficient deep-draft navigation access to the New Orleans and Baton Rouge reaches of the Mississippi River via Southwest Pass by enlarging the existing channel to a project depth of 55 feet; enlarging the adjacent channel along the left descending bank in New Orleans to a 40-foot depth, providing a turning basin at Baton Rouge, and providing training works in the passes and in four crossings between New Orleans and Baton Rouge to reduce maintenance. Construction of mitigation measures is required due to the saltwater intrusion caused by the deeper channel. The programmed work includes enlargement of the existing channel to an initial depth of 45 feet in the reach from the Gulf of Mexico to Mile 232.4 above New Orleans, the 40-foot enlargement in New Orleans Harbor, and construction of the mitigation works. The unprogrammed work includes enlargement of the 45-foot channel to 55 feet in the reach from the Gulf of Mexico to Mile 232.4, enlargement of the existing 40-foot channel to 55 feet from Mile 232.4 to Mile 233, construction of a turning basin at Baton Rouge, and training works in the passes.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986 and 1988, and the Energy and Water Development Appropriations Act of 1993.

REMAINING BENEFIT - REMAINING COST RATIO: 7.0 to 1 at 2-5/8 percent.

TOTAL BENEFIT - COST RATIO: 11.1 to 1 at 8-1/8 percent.

INITIAL BENEFIT - COST RATIO: 8.1 to 1 at 8-1/8 percent (FY 1985).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in July 1981 at 1980 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)		\$ 179,800,000	(1 6411 2661)	COM LETE	OGNEDOLL
Programmed Construction	\$ 35,234,000		Phase I	96	Indefinite <sup>1</sup>
Unprogrammed Construction	144,566,000		(Gulf-Mile 18	•	
F. (		4 000 000	Phase II	100	Dec 1994
Estimated Appropriation Requirement (USCG)	0	1,200,000	(Mille 181-Ba Phase III	aton Rouge, 45')	Indefinite <sup>2</sup>
Programmed Construction Unprogrammed Construction	1,200,000			0 Rouge, 55')	maemme
Estimated Total Appropriation Requirement		\$ 181,000,000	Entire Project	30	Indefinite <sup>2</sup>
Programmed Construction	35,234,000	, ,	•		
Unprogrammed Construction	145,766,000				
Future Non-Federal Reimbursement		1,161,000			
Programmed Construction	1,161,000	1,101,000			
Unprogrammed Construction	0				
Estimated Federal Cost (CoE) (Ultimate)	0.4.0=0.000	\$ 178,639,000			
Programmed Construction Unprogrammed Construction	34,073,000 144,566,000				
Onprogrammed Construction	144,300,000				
Estimated Non-Federal Cost (Ultimate)	24 000 000	\$ 446,000,000			
Programmed Construction Cash Contributions \$ 4,750,000	21,080,000				
Other Costs 15,169,000					
Reimbursements 1,161,000					
Navigation \$ 1,161,000					

<sup>&</sup>lt;sup>1</sup> Completion of mitigation will depend on future growth in Plaquemines Parish.

<sup>&</sup>lt;sup>2</sup> Phase III work on the GDM is programmed. The remaining Phase III work is unprogrammed pending the results of the GDM investigations.

### SUMMARIZED FINANCIAL DATA (Continued)

Unprogrammed Construction \$ 424,920,000

Cash Contributions \$ 144,601,000 Other Costs 280,319,000 Reimbursements 0

Navigation 0

Total Estimated Programmed Construction Cost	\$ 56,314,000
Total Estimated Unprogrammed Construction Cost	\$ 570,686,000
Total Estimated Project Cost	\$ 627,000,000

		ACCUM.
Allocations to 30 September 2000	25,766,000	PCT. OF EST.
Conference Allowance for FY 2001	719,000	FED. COST
Allocation for FY 2001	1,653,000 <sup>1</sup>	
Allocations through FY 2001	27,419,000	15
Allocation Requested for FY 2002	575.000	16
Programmed Balance to Complete After FY 2002	\$ 7,240,000	

Programmed Balance to Complete After FY 2002 \$ 7,240,000 Unprogrammed Balance to Complete After FY 2002 \$ 144,566,000

#### PHYSICAL DATA

### Channels and Canals:

Southwest Pass: 55 feet deep (Mean Low Gulf) by 750 feet wide, 17.5 miles.

Southwest Pass Bar Channel: 55 feet deep (Mean Low Gulf) by 600 feet wide from Mile 18.0 below Head of Passes to

the -55 foot (Mean Low Gulf) contour in the Gulf of Mexico (Mile 22.1 below Head of

Passes)

Mississippi River: 55 feet deep (Mean Low Gulf) by 750 feet wide, 233 miles long.

Baton Rouge Turning Basin: 55 feet deep (Mean Low Gulf) by 1,600 feet wide, 4,000 feet long.

# Breakwaters and Seawalls:

Control and contraction structures in South Pass and Pass-a-Loutre. Size and number of structures to be determined in the future.

<sup>&</sup>lt;sup>1</sup> Reflects \$115,000 reduction assigned as savings and slippage; \$1,050,000 reprogrammed to the project, and \$1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

# Mitigation Measures:

Underwater dredged material sill at Mile 64 Above Head of Passes (top elevation -55.0 Mean Low Gulf), modifications to the Belle Chasse water treatment plant with water supply pipelines to the West Pointe-a-la-Hache and Boothville water treatment plants, and construction of a water supply reservoir at Davant, LA to supply the East Pointe-a-la-Hache water treatment plant. Until construction of a permanent mitigation plan is completed, an interim plan has been implemented to barge fresh raw water, with Operations and Maintenance, General funds, to three existing water treatment plants during periods of increased salinity caused by the deeper channel. (See Other Information).

JUSTIFICATION: According to the latest data, the ports of South Louisiana, Baton Rouge, New Orleans, and Plaquemines are ranked as the first, fourth, sixth, and seventh ports in the United States, respectively, based on the total tonnage of waterborne commerce. Collectively, these ports represent the greatest concentration of Waterborne Commerce in the United States. Much of this commerce is in liquid bulk and dry bulk oceangoing cargo which could be shipped much more economically using a deeper channel. The cargo was previously shipped in smaller ships or in lightly loaded larger ships over the 40-foot deep channel. The construction of the 45-foot channel has resulted in significant savings in the transportation cost of the oceangoing commerce moving over the channel. Deepening the channel to 55 feet will result in additional significant savings. The average annual benefits, all navigation, are \$1,292,000,000, based on October 1980 prices.

Existing Commerce (000 tons):					
Commodity	1991	1992	1993	1994	1995 <sup>1</sup>
·	(000)	(000)	(000)	(000)	(000)
Coal and Coal Products	55,257	51,694	42,295	42,175	43,411
Petroleum and Petroleum Products	67,046	69,173	72,331	70,081	69,582
Crude Petroleum	48,687	52,459	58,877	60,997	55,467
Chemicals and Chemical Products	35,256	36,608	38,511	44,979	46,443
Crude Materials, Inedible					
(except fuels)	36,478	35,381	36,919	40,903	41,300
Primary Manufactured Goods	11,792	10,544	13,476	27,078	28,255
Food & Farm Products	39,045	42,169	39,533	38,317	40,727
Corn	70,059	72,743	65,121	59,522	80,655
Wheat	16,705	21,455	16,223	12,820	13,971
Soybeans	30,171	33,111	31,718	29,911	33,630
Manufactured Equip, Machinery					
& Products	824	845	980	876	938
Miscellaneous	76	161	164	192	266
Total	411,396	426,343	416,148	427,851	454,645

<sup>&</sup>lt;sup>1</sup> Latest available information.

The average deep draft tonnage trafficked thru the project from 1979 thru 1989 was 183,197,960 tons. The deep draft savings per ton for liquid bulk cargo is \$4.60; for dry bulk cargo, \$6.60, and for general cargo, \$.90. The ships expected to traffic the project in the future would carry up to 150,000 DWT (dead weight tons). Dredged material will be deposited on lands adjacent to the channel from Venice, Louisiana to the Gulf of Mexico. A substantial amount of these lands are within existing rights-of-way. Disposal for construction work above Venice, Louisiana, will be accomplished in the main channel of the Mississippi River.

FISCAL YEAR 2002: The requested amount will be applied as follows:

### Continue:

Permanent Saltwater Intrusion Mitigation Facilities	\$ 200,000
Planning, Engineering and Design - Phase I	47,000
Planning, Engineering and Design - Phase III	328,000
Total Project	\$ 575,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Acts of 1986 and 1988, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Constructio and Reimbursements	Annual Operation, Maintenance, Repair, n Rehabilitation, and Replacement Costs
Phase I, 45', Gulf - Mile 181.0	\$ 158,000	\$
Provide lands, easements, rights-of-way and dredged material disposal areas.		
Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	6,795,000	
Dredge New Orleans Harbor.	1,106,000	
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions and/or equivalent work).	3,237,000	
Pay 25 percent of costs for mitigation reimbursement contributions and/or equivalent work.	6,356,000	
Pay maintenance dredging costs adjacent to New Orleans harbor wharves.		1,460,000
Pay an additional 10 percent of the cost allocated to deep draft navigation within a period of 30 years following completion of construction [which is partially offset by a credit allowed for the value of lands, easements, rights-of-way, relocations and dredged material disposal areas].	1,161,000	
Subtotal, Phase I	\$ 18,813,000	\$ 1,460,000

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Phase II, 45', Mile 181 to Baton Rouge  Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	\$ 736,000	\$
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions).	1,531,000	
Subtotal, Phase II	\$ 2,267,000	
Phase III, 55', Gulf to Baton Rouge		
Provide lands, easements, rights-of-way and dredged material disposal areas.  Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	\$ 435,000 279,884,000	
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions). Pay 50 percent of costs to construct the channel from 45 feet to 55 feet (cash contributions).	1,463,000 143,138,000	
Pay 50 percent of maintenance dredging costs between 45 feet and 55 feet.		51,034,000
Subtotal, Phase III	\$ 424,920,000	\$ 51,034,000
Project Total	\$ 446,000,000	\$ 52,494,000

The non-Federal sponsor has agreed to make all payments of first costs (excluding the reimbursement) concurrently with project construction and to pay an additional 10 percent reimbursement of the costs allocated to deep draft navigation less a credit for the value of lands, easements, rights-of-way, relocations, and dredged material disposal area, within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: On 13 September 1985, the Governor of the State of Louisiana designated the Louisiana Department of Economic Development, formerly the Department of Commerce, as the local sponsor for the project. A Local Cooperation Agreement for a 45-foot channel from the Gulf of Mexico to Mile 181 Above Head of Passes (Phase I) was executed on 30 June 1986. The first supplement to the Local Cooperation Agreement reflecting the Water Resources Development Act of 1986 cost-sharing provisions was executed on 15 June 1987. A second supplement reflecting the changes required by the Water Resources Development Act of 1988 was executed on 25 June 1990. A third supplement was executed on 28 May 1993 that provides for the local sponsor to construct the permanent saltwater intrusion mitigation facilities. (See Other Information for more details). A Project Cooperation Agreement for the 45-foot channel from Mile 181 to Mile 232.4 (Phase II) was executed on 3 September 1993.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$179,800,000 is an increase of \$3,800,000 from the latest estimate (\$176,000,000) presented to Congress (FY 2001). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$ 3,800,000
Total	\$ 3,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 2 July 1982. A Supplemental Information Report to this final Environmental Impact Statement addressing the prototype dredging of Fairview Crossing was filed with the Environmental Protection Agency on 28 July 1983. A similar report addressing construction of a prototype saltwater intrusion sill was filed with the Environmental Protection Agency on 14 September 1983. A Supplemental Information Report addressing the underwater dredged material sill at Mile 64 Above Head of Passes, to mitigate for increased saltwater intrusion, was filed with the Environmental Protection Agency on 24 September 1985. An Environmental Assessment/Finding of No Significant Impact for the Venice, Louisiana to Mile 181 Above Head of Passes reach, for dredging four crossings and the approach channels to berthing areas in New Orleans Harbor, was filed with the Environmental Protection Agency on 18 December 1987. Another Environmental Assessment/Finding of No Significant Impact addressing the interim saltwater mitigation plan and revised marsh creation quantities was filed with the Environmental Protection Agency on 22 April 1987. Another Environmental Assessment/Finding of No Significant Impact addressing the training works required at four crossings between mile 181 Above Head of Passes and mile 232.4 Above Head of Passes was signed on 13 July 1990. Another Environmental Assessment/Finding of No Significant Impact addressing the permanent saltwater intrusion mitigation plan (water pipeline construction) was signed on 15 January 1991. An Environmental Assessment/Finding of No Significant Impact evaluating dredging of Sardine Point was completed 1 April 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1982, and funds to initiate construction were appropriated in Fiscal Year 1985.

Dredging of the 45-foot channel south of New Orleans to the Gulf of Mexico was completed on 1 December 1987. Dredging of the 45-foot channel from New Orleans to Mile 181 Above Head of Passes was completed on 17 December 1988. Dredging of the 45-foot channel from Mile 181 Above Head of Passes to Baton Rouge (Mile 232.4) was completed on 9 December 1994.

As a result of severe drought conditions in the midwest part of the country during the summer of 1988, interim saltwater intrusion mitigation measures for the 45-foot channel were implemented on 30 June 1988, with construction of an underwater dredged material sill in the Mississippi River at Mile 63.7 Above Head of Passes which was completed to an elevation of -45.0 feet NGVD on 1 August 1988.

Part of the interim mitigation plan was to barge fresh water to the three municipal water treatment plants at Boothville and at East and West Pointe-a-la-Hache, Louisiana, downstream of the sill. Approximately 101 million gallons of water was barged, commencing on 14 July 1988 and continuing through 2 December 1988. Operations and Maintenance, General, funds were used for both the barging operation and sill construction. The intrusion event was dealt with effectively, and both the sill and the barging of freshwater to Lower Plaquemines Parish were demonstrated to be practicable.

The permanent mitigation plan involves the State of Louisiana assuming the responsibility for Plaquemines Parish to upgrade their existing water distribution system to handle the increase in saltwater intrusion caused by the 45-foot channel. The Corps of Engineers will reimburse the State for the Federal share (75%) of the cost for this plan which is more cost effective than the Corps' barging plan for a 45-foot channel. The State will relieve the Corps of responsibility to mitigate for the potable water needs in lower Plaquemines Parish when this plan is complete. Federal participation in the construction of the permanent mitigation plan is limited by a cost cap. The cost cap was incorporated into the third supplemental local cooperation agreement for Phase I. The cost cap is based on the least costly Federal alternative which is the cost to barge water to Plaquemines Parish during times of increased salinity caused by the deeper channel over the 50-year project life. Once the cost of the permanent mitigation plan equals or exceeds the cost cap, Federal participation in mitigation for Phase I of the project will end. Construction of the permanent mitigation plan began on 21 October 1993. The Corps remains responsible for construction of the underwater sill to mitigate above Mile 64 above Head of Passes when required. Design Memorandum Supplement No. 6 covering the permanent mitigation plan was approved on 7 December 1992.

Phase II of the project provides for the construction of the 45-foot channel from mile 181.0 to Baton Rouge. Language contained in the Fiscal Year 1993 Energy and Water Development Appropriations Conference Report directed the Corps to initiate construction of Phase II immediately after execution of the Project Cooperation Agreement. The Project Cooperation Agreement was executed on 3 September 1993. Construction of the 45-foot channel in this reach began on 31 July 1994 and was completed on 9 December 1994.

The State of Louisiana requested a preliminary analysis of Phase III, the remaining work on the authorized project. This analysis included a review of cost estimates and design assumptions and proposals for maintenance dredging reductions. Based on the results of this analysis, the State of Louisiana requested the Corps to proceed with a General Design Memorandum for the Phase III work. A General Design Memorandum is scheduled for submission in March 2002.

# SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

	PH/	ASE I	
Estimated Appropriation Requirement			
(Corps of Engineers)			\$ 28,778,000
Programmed Construction		\$ 28,778,000	
Unprogrammed Construction		0	
Estimated Appropriation Requirement			
(US Coast Guard)			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Total Appropriation Requirement			\$ 28,778,000
Programmed Construction		28,778,000	
Unprogrammed Construction		0	
Future Non-Federal Reimbursement			1,161,000
Programmed Construction		1,161,000	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate)			
(Corps of Engineers)			\$ 27,617,000
Programmed Construction		27,617,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost (Ultimate)			\$ 18,813,000
Programmed Construction		18,813,000	
	3,237,000		
	1,415,000		
	1,161,000		
Navigation \$ 1,161,000			
Unprogrammed Construction		0	
Total Estimated Programmed Construction Co			\$ 46,430,000
Total Estimated Unprogrammed Construction	Cost		\$ 0
Total Estimated Project Cost			\$ 46,430,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PHASE I: Not applicable because construction is complete.

TOTAL BENEFIT - COST RATIO FOR PHASE I: The Phase I channel has been complete since 1988. A total benefit-cost ratio was not computed for Phase I as a separable element.

		PHASE II	
Estimated Appropriation Requirement			
(Corps of Engineers)			\$4,594,000
Programmed Construction		\$4,594,000	
Unprogrammed Construction		0	
Estimated Appropriation Requirement			
(US Coast Guard)			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Total Appropriation Requireme	nt		\$4,594,000
Programmed Construction		4,594,000	
Unprogrammed Construction		0	
Future Non-Federal Reimbursement			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate)			
(Corps of Engineers)			\$4,594,000
Programmed Construction		4,594,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost (Ultimate)			\$2,267,000
Programmed Construction		2,267,000	
Cash Contributions	\$ 1,513,000		
Other Costs	754,000		
Reimbursements	0		
Unprogrammed Construction		0	
Total Estimated Programmed Construction	on Cost		\$ 6,861,000
Total Estimated Unprogrammed Construc	tion Cost		\$ 0
Total Estimated Project Cost - Phase II			\$ 6,861,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PHASE II: Not applicable because construction is complete.

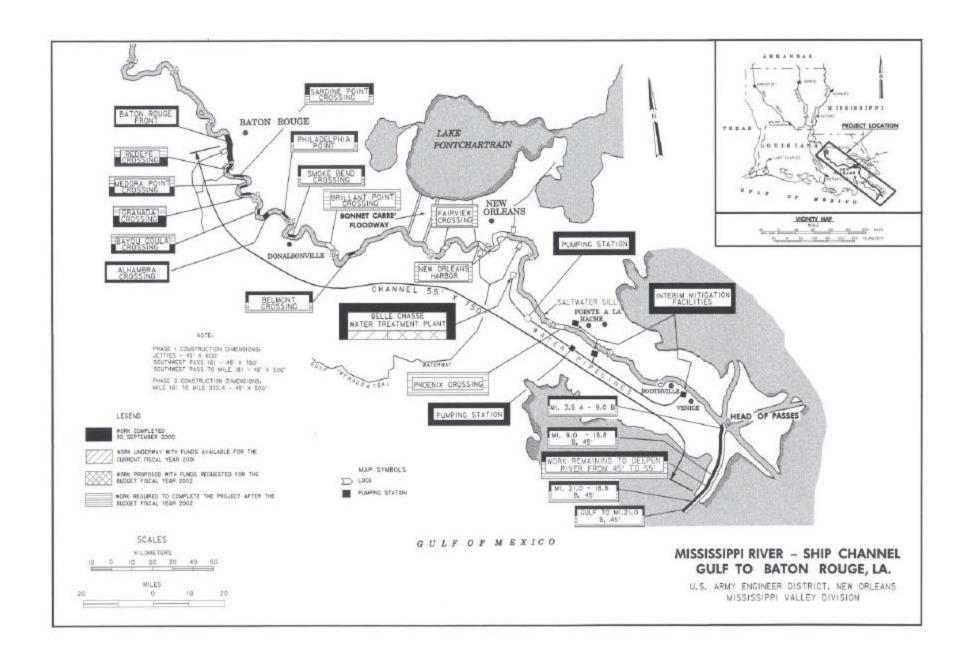
TOTAL BENEFIT-COST RATIO FOR PHASE II: The Phase II channel was completed on 9 December 1994.

# PHASE III

Estimated Appropriation Requirement (Corps of Engineers) Programmed Construction Unprogrammed Construction			\$ \$ 1	3,023,000 44,566,000	\$ 147,589,000
Estimated Appropriation Requirement (US Coast Guard)					\$ 1,200,000
Programmed Construction			Φ	0	φ 1,200,000
Unprogrammed Construction			\$ \$	1,200,000	
Estimated Total Appropriation Requirement			Ψ	1,200,000	\$ 148,789,000
Programmed Construction			\$	3,023,000	Ψ 140,700,000
Unprogrammed Construction			*	45,766,000	
Future Non-Federal Reimbursement			Ψ.	10,7 00,000	\$ 0
Programmed Construction			\$	0	Ţ ,
Unprogrammed Construction			\$ \$	0	
Estimated Federal Cost (Ultimate)			•		
(Corps of Engineers)					\$ 147,589,000
Programmed Construction			\$	3,023,000	, , ,
Unprogrammed Construction			\$ 1	44,566,000	
Estimated Non-Federal Cost (Ultimate)					\$ 424,920,000
Programmed Construction `			\$	0	
Cash Contributions	\$	0			
Other Costs		0			
Reimbursements		0			
Unprogrammed Construction			\$ 4	24,920,000	\$ 424,920,000
Cash Contributions	\$ 144,60	01,000			
Other Costs	\$ 280,3	19,000			
Reimbursements		0			
Total Estimated Programmed Construction C Total Estimated Unprogrammed Construction Total Estimated Project Cost - Phase III		es \$1,200 for Co	oast Guard)		\$ 3,023,000 \$ 570,686,000 \$ 573,709,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: The remaining benefit - remaining cost ratio for Phase III is being determined in the GDM studies which are currently underway.

TOTAL BENEFIT - COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: The total benefit - cost ratio for Phase III is being determined in the GDM studies which are currently underway.



APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Mississippi River Between the Ohio and Missouri Rivers (Regulating Works), Missouri and Illinois (Continuing)

LOCATION: The project involves improvement of the Mississippi River from the mouth of the Ohio River to the mouth of the Missouri River at mile 195 above the mouth of the Ohio River. The project covers the following counties: (Missouri) St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi; (Illinois) Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, and Pulaski.

DESCRIPTION: The project consists of a navigation channel 9 feet deep and not less than 300 feet wide with additional width in bends, from the mouth of the Ohio River to the northern boundary of the City of St. Louis, a distance of approximately 191 miles, thence 200 feet wide, with additional width in bends, to the mouth of the Missouri River. It will be achieved by means of dikes, revetment, construction dredging, and rock removal. All work is programmed.

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 23.9 to 1 at 2.5 percent.

TOTAL BENEFIT-COST RATIO: 10.5 to 1 at 2.5 percent.

INITIAL BENEFIT-COST RATIO: 4.5 to 1 at 2.5 percent (FY 1961).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Upper Mississippi River Master Plan Report of 1982 at 1986 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2001)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$269,273,000		Entire Project	77	Being determined
Estimated Non-Federal Cost Cash Contributions	0				
Other Cost	0		PHYSICAL D	ΔΤΔ	
Other Cost	O .		TITIOIOALD	AIA	
Total Estimated Project Cost	\$269,273,000		Channel 195 miles		
•	, ,		Ohio River to St. Louis	9 x 300 feet	
Allocations to 30 September 2000	\$193,240,000		St. Louis to Missouri Ri	ver 9 x 200 feet	
Conference Allowance for FY 2001	6,500,000				
Allocations for FY 2001	5,447,000 <sup>1</sup>				
Allocations through FY 2001	198,687,000	74			
Allocation Requested for FY 2002	4,000,000	75			
Programmed Balance to Complete After FY 2002	66,586,000				
Unprogrammed Balance to Complete After FY 2002	0				

JUSTIFICATION: The Mississippi River between the Ohio and Missouri Rivers is a major artery of the inland waterway system. Commerce in this reach has increased from 4,500,000 tons in 1945 to 124,692,000 tons in 1999 worth approximately \$15 billion. Commerce is expected to increase to 167,000,000 tons by the year 2020; therefore, it is essential that construction of project works be continued at a rate which will insure 9-foot channel depths for a year-round navigation season. The average annual benefits, all navigation, are \$261,809,000.

63

<sup>1</sup> Reflects \$1,040,000 reduction assigned as savings and slippage and \$13,000 rescinded from the project in accordance with the Consolidated Appropriations Act, 2001.

FISCAL YEAR 2002: The requested amount will be applied as follows:

Initiate and Complete: Ft. Chartres Reach, Phase 4, Mile 140-125 Continue: Lands and Damages	\$ 610,000 265,000
Thompson Bend Riparian Corridor	15,000
Project Dedicated Operating Equipment	25,000
Complete: Mosenthein Reach/Ivory Landing, Channel Mile 195-154	1,460,000
Planning, Engineering and Design	1,500,000
Supervision and Administration	125,000
Total	\$4,000,000

NON-FEDERAL COST: None

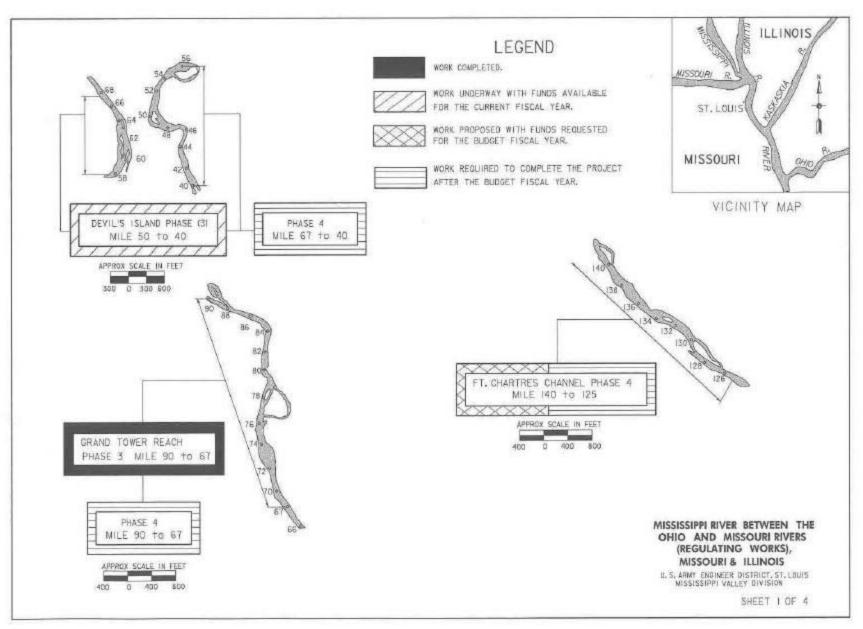
STATUS OF LOCAL COOPERATION: Not applicable.

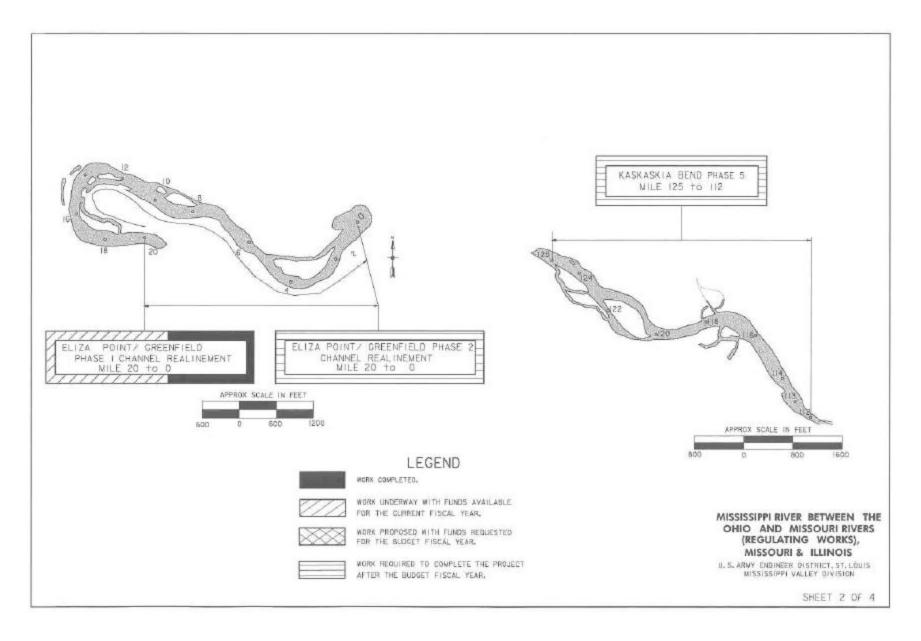
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$269,273,000 is a decrease of \$5,054,000 from the latest estimate (\$274,327,000) presented to Congress (FY 2001). This change includes the following items:

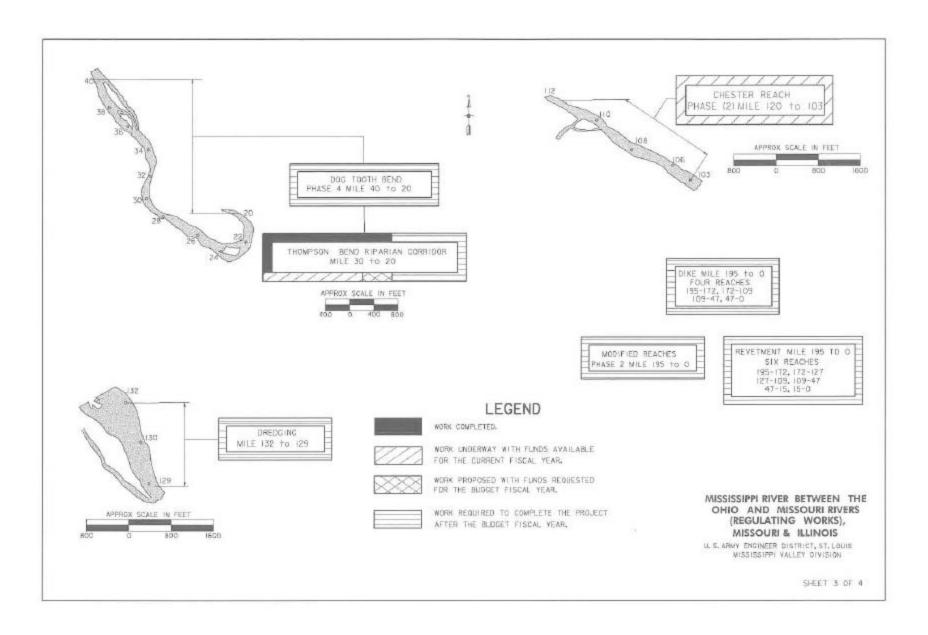
Item	Amount
Price Escalation on Construction Features	\$-5,054,000
Post Contract Award and Other Estimating Adjustments	-2,011,000
Schedules Changes	2,011,000
Total	\$-5,054,000

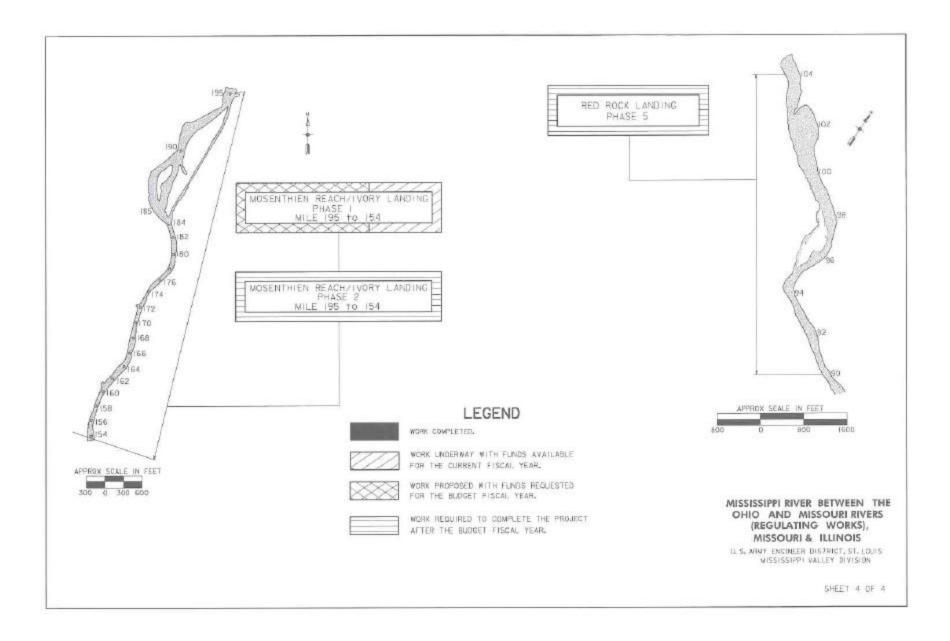
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 April 1976 and published in the Federal Register on 23 April 1976. An Environmental Analysis was completed for the Rock Removal and Finding of No Significant Impact signed on 28 October 1988.

OTHER INFORMATION: Planning was initiated prior to 1910, and construction was initiated in 1910. This project requires no mitigation.









APPROPRIATION TITLE: Construction, General – Locks and Dams (Navigation)

PROJECT: Melvin Price Lock and Dam, Illinois and Missouri (Continuing)

LOCATION: Melvin Price Lock and Dam is located in Madison County, Illinois, and St. Charles County, Missouri, in the vicinity of Alton, Illinois, at approximately mile 200.8 above the mouth of the Ohio River.

DESCRIPTION: The project includes one 1,200-foot lock; one 600-foot lock (see Other Information); a gated dam with 9 tainter gates, an overflow dike; removal of most of the existing structure; relocation/abandonment of the Burlington-Northern Railroad bridge and a visitors center. Mitigation land was provided to compensate for wildlife losses due to creation of a new pool for the two-mile distance downstream of the existing structure. Recreation facilities will be developed with the city of Alton, Illinois, consistent with the Water Resources Development Acts of 1986, 1990, 1992, and 1996. The project is part of the Upper Mississippi River Navigation System. All work is programmed.

AUTHORIZATION: Internal Revenue Code of 1954, Title I – Replacement of Locks and Dam 26; Water Resources Development Acts of 1986, 1990, 1992, and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable since the project is nearing completion.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 7/8 percent (FY 1974).

BASIS OF BENEFIT-COST RATIO: Benefits are based on Supplement No. 2 to Design Memorandum No. 2, approved on 31 August 1979 at October 1978 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2001)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$740,636,000		Entire Project Lock and Dam	99 99	Being determined Dec 1994
Estimated Non-Federal Cost Cash Contribution	\$7,425,000	7,425,000		Open to Navigation	100	Feb 1990
Other	0				PHYSICAL	DATA
Total Estimated Project Cost		\$748,061,000		Locks: One – 1,200 fe One – 600 feet x 110 f		Information)
Allocations to 30 September 2000		\$730,151,000		Dam: Non-navigable 9	9 tainter gates	,
Conference Allowance for FY 2001		1,400,000		Overflow Dike: Earth		
Allocation for FY 2001		1,173,000 <sup>1</sup>		Spur Dike: Earth Emb	oankment, 2.4	miles
Allocations through FY 2001		731,324,000	99	Relocations:		
				Roads (\$2,233,000)		
Allocation Requested for FY 2002		500,000	99	Railroad (\$13,933,000		
Programmed Balance to Complete after FY 2002		\$8,812,000		Utilities (\$15,959,000)		
Unprogrammed Balance to Complete after FY 2002		0		Pumping Plant: One – 225 cubic feet per second		
				Lands and Damages:		
				Acres – 4,286; Typ		
						nercial, recreational,
				and industrial lar river.	na ana improve	ments fronting the
				Improvements – In	dustrial comm	ercial and
				recreation building		oroidi, dirid

<sup>&</sup>lt;sup>1</sup>Reflects \$224,000 reduction assigned as savings and slippage and \$3,000 rescinded from the project in accordance with the Consolidated Appropriations Act, 2001.

JUSTIFICATION: The poor physical condition of the old Locks and Dam No. 26 and the inability of the locks to handle current and projected traffic without costly delays made replacement imperative. Both the dam and locks were set on piles, which were driven into the riverbed sands and were not supported by bedrock. The structure, which was placed in operation in 1938, had a history of excessive deflections, settlements, and loss of foundation material. Remedial measures were undertaken to correct deficiencies, but permanent repair of the old structure was impractical because of engineering and cost considerations. The average annual waterborne commerce tonnage (1991-2000) was 74.2 million tons valued at approximately \$10 billion. Grains, chemicals, petroleum, and coal account for 90 percent of this traffic. Because of the small size of the locks, multiple lockages were required to pass a complete tow measuring 1,200 feet in length. The average delay to tows at the old Locks No. 26 was approximately 10.5 hours. Based on the Master Plan Study (authorized by P.L. 95-502), a single lock 110 feet wide by 1,200 feet long would have an estimated capacity of 94 to 100 million tons per year. The length of 1,200 feet permits tows to lock through as a single unit, thus eliminating the delays from double locking and congestion. Future tow sizes are expected to remain at 110 feet wide by 1,200 feet long. Total transportation charges for commodity movements by inland water range between 40 and 60 percent lower than least cost alternative modes. More than 60 percent of traffic is grain, the bulk of which is for export. Gulf export grain now moves, depending on the origin and volume, at approximately \$4.00 to \$6.00 savings per ton. Average annual benefits are as follows:

An	nual Benefits	Amount
	Navigation Recreation	\$82,678,000 469,000
	Total	\$83,147,000
FISCAL YEAR 2002: The requested amount will be applied	ed as follows:	
Continue: As-Built Drawin O&M Manuals Visitor Center E Complete: Esplanade Land Planning, Engineering, and Supervision and Administra	Exhibits dscaping Design	20,000 20,000 345,000 10,000 75,000 30,000
Total		\$ 500,000

Annual Ranofite

1 mount

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, which are applicable to unstarted separable elements, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay one-half of the separable and joint costs allocated to recreational navigation, pay one-half of the separable cost of recreation facilities, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation and recreational navigation facilities.	\$7,425,000	\$306,000
Total Non-Federal Costs	\$7,425,000	\$306,000

3 April 2001

STATUS OF LOCAL COOPERATION: The Water Resources Development Act of 1990 contains provisions that allow the state of Illinois and the Corps to enter into a Project Cost-sharing Agreement (PCA) for the construction of riverfront recreation facilities. The Water Resources Development Act of 1992 amended the 1990 Act by allowing cost sharing with other non-Federal interests. Public Law 106-554 directs the Corps to enter into an agreement that allows the City of Alton, Illinois, to construct recreation facilities and the Corps to reimburse the city for 50 percent of the cost. Approximately \$10 million in recreation facilities will be cost-shared. The city of Alton, Illinois, submitted a letter of intent dated 13 February 1991 for sharing the cost of developing recreation facilities along the riverfront at Alton, in the vicinity of the existing structure. A plan for recreational development will be prepared. Construction of the recreation facilities will be initiated when a PCA is executed.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$740,636,000 is a decrease of \$64,000 from the latest estimate (\$740,700,000) presented to Congress (FY 2001). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ - 12,000
Design Changes	-328,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	276,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 August 1976 and published in the Federal Register on 8 September 1976.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1970, and funds to initiate construction were appropriated in Fiscal Year 1974.

In accordance with Public Law 97-118, the project name changed from Lock and Dam 26 (Replacement) to Melvin Price Lock and Dam.

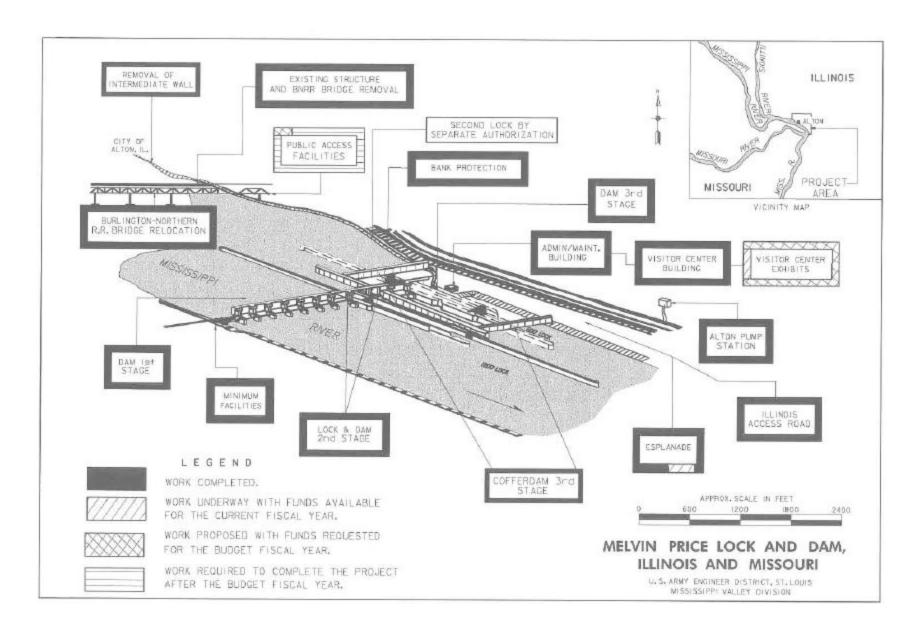
Dredge material disposal sites were used on Ellis Island during construction, but this phase is complete and no further construction dredging is expected.

The completed 600-foot second lock was funded as a separate project, cost shared with the Inland Waterways Trust Fund. The second lock was authorized by the Supplemental Appropriations Act of 1985 and the Water Resources Development Act of 1986.

Fish and Wildlife mitigation costs are \$3,446,000.

Total

\$ - 64.000



Mississippi Valley Division

St. Louis District

Melvin Price Lock and Dam, Illinois and Missouri

3 April 2001 74

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Inner Harbor Navigation Canal Lock, Louisiana (Continuing)

LOCATION: The project is located within the City of New Orleans, Louisiana, in Orleans Parish. It is a combined deep and shallow draft canal extending northward from the Mississippi River to Lake Pontchartrain.

DESCRIPTION: The plan of improvement consists of construction of a precast, floated-in, concrete lock; replacement of the St. Claude Avenue bridge with a new, low level double bascule bridge; construction of a temporary by-pass bridge at St. Claude Avenue; replacement of the center lift-span and raising of the towers on the Claiborne Avenue bridge; provisions for by-pass channels during construction; extension of the Mississippi River flood protection along the canal to the site of the new lock; and implementation of a community impact mitigation plan. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1956, Water Resources Development Acts of 1976, 1986 and 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 2.1 to 1 at 7-1/8 percent.

TOTAL BENEFIT - COST RATIO: 2.1 to 1 at 7-1/8 percent.

INITIAL BENEFIT - COST RATIO: 1.75 to 1 at 7-3/8 percent (FY 1961).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Evaluation Report approved in February 1998 at October 1998 price levels.

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SUMMARIZED FINANCIAL DATA			STATUS (1 January 2001)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CoE) General Appropriations Inland Waterways Trust Fund	\$ 363,800,000 <sup>1</sup> 288,200,000	\$652,000,000	Total Project	0	Being determined
Estimated Federal Cost (USCG)		45,000			
Estimated Non-Federal Cost Cash Contribution Other	35,295,000 27,705,000 <sup>2</sup>	63,000,000			
Total Estimated Project Cost	21,100,000	\$715,045,000			
	GENERAL APP	ROPRIATIONS	INLAND WATERWAYS TRUST FUND		ACCUM. PCT. OF EST. FED. COST
	Deep Draft	Shallow Draft	Shallow Draft		
Allocations to 30 September 2000 Conference Allowance for FY 2001 Allocation for FY 2001	0 0 0	26,985,000 0 8,605,500	10,795,000 16,349,000 24,795,500 <sup>3</sup>		
Allocations through FY 2001	0	35,590,500	35,590,500		11
Allocation Requested for FY 2002 Programmed Balance to Complete After FY 2002 Unprogrammed Balance to Complete After FY 2002	0 75,600,000 0	5,000,000 247,609,500 0	5,000,000 247,609,500 0		13
	J	•	•		

<sup>&</sup>lt;sup>1</sup> Includes Federal Deep Draft Cost of \$75,600,000 that are not cost shared with the Inland Waterways Trust Fund. Details are included in Supplement 1 to the Evaluation Report, approved by ASA (CW) September 2000.
<sup>2</sup> Non-compensable relocations that are the responsibility of the facility owners. Details are included in Supplement 1 to the Evaluation Report, approved by

ASA (CW) September 2000.

<sup>&</sup>lt;sup>3</sup> Reflects \$2,616,000 reduction assigned as savings and slippage, \$19,700,000 anticipated reprogrammed to the project, and \$32,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

#### PHYSICAL DATA

Locks:

New Lock, 110 feet wide by 36 feet deep by 1,200 feet long

Levees and Floodwalls: 6 miles

Relocations:

Low Level Bridge, St. Claude

Avenue

Semi-High Level Bridge, Claiborne

Avenue

JUSTIFICATION: The existing Inner Harbor Navigation Canal Lock passes barge traffic between the Mississippi River and the Gulf Intracoastal Waterway at New Orleans and is a vital link in the Gulf Intracoastal Waterway system. The lock also is the connecting link for ship traffic between the Mississippi River-Gulf Outlet and the Mississippi River at New Orleans. Delays to the navigation traffic average 11 hours, with 24-36 hour delays common. The average annual tonnage shipped thru the lock by the barge traffic the last 10 years is about 24,000,000 tons. Coal, petroleum products and crude petroleum account for about 2/3 of the tonnage. Other major commodities include metallic ores, industrial chemicals and non-metallic minerals. The number of ships locked from 1970 through 1995 averaged about 197 per year. This is a reduction in ship lockage since 1961, and is due in part to the development of the Mississippi River-Gulf Outlet channel and the inadequacy of the Inner Harbor Navigation Canal Lock for ship traffic. Studies indicate that, with a new lock, barge traffic would generally be expected to increase to about 40,000,000 tons by 2035, with minimal delays, and that the number of ship lockages by 2035 could be approximately 500 per year. The maximum size ship that could use the new lock is a 68,000,000 DWT Dry Bulk vessel and a 46,000,000 DWT container vessel. Average annual benefits are as follows:

Annual Benefits	Amount
Navigation Vehicular	\$ 88,466,000 6.547,000
Advanced Closure Navigation Losses Prevented	10,640,000
Savings to Existing Project	4,053,000
Total	\$109,706,000

# FISCAL YEAR 2002: The requested amount will be applied as follows:

Continue:

Community Impact Mitigation Plan \$ 1,735,000 Florida Ave Siphon Relocation \$ 2,165,000

Complete:

Westbank Levees, PH I600,000Demolish Galvez St. Wharf1,700,000Planning, Engineering and Design3,000,000Supervision and Administration800,000

Total \$10,000,000

NON-FEDERAL COST: The costs of the new lock were apportioned between general cargo navigation (deep draft) and inland navigation (shallow draft). Those costs assigned to inland navigation (22 feet deep x 110 feet wide x 500 feet long), will be funded 50 percent from the Inland Waterways Trust Fund and 50 percent from the general fund of the U.S. Treasury. The costs of all lands, easements, rights-of-way, and dredged material disposal areas and the costs for utility relocations are included in the inland navigation Plan. Only the compensable relocations costs will be cost-shared 50/50. The non-compensable relocations will be the responsibility of the respective non-Federal owners. Those costs assigned to general cargo navigation will be cost-shared in accordance with Section 101 of the Water Resources Development Act of 1986. Details of this cost-sharing are included in Supplement No. 1 to the Evaluation Report approved by the ASA (CW) in September 2000.

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the following requirements:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs
Modify or relocate utilities and facilities (except railroad bridges) where necessary for construction of the project. (Utility Owners)	\$ 27,705,000	\$
Non-Federal cash requirement based on the incremental cost increase between the Shallow Draft Plan and the Deep Draft Plan.	35,295,000	2,000
Total Non-Federal Costs	\$ 63,000,000	\$ 2,000

STATUS OF LOCAL COOPERATION: The Port of New Orleans by letter dated 14 April 1997 expressed their intent to support the project and furnished their preliminary financing plan to provide their local share. Coordination of a Project Cooperation of Agreement (PCA) is ongoing. Execution of the PCA is expected by July 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$652,045,000 is an increase of \$77,000,000 from the last estimate (\$575,045,000) presented to Congress (FY 2001). This change includes the following item:

ITEM	AMOUNT
Evaluation Report Supplement No. 1	\$ 44,550,000
Price Escalation on Construction Features	32,450,000
Total	\$ 77,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was submitted to the Environmental Protection Agency (EPA) in February 1998. The Record of Decision was issued in December 1998.

OTHER INFORMATION: Funds to initiate engineering and design were appropriated in Fiscal Year 1957. Funds to initiate construction were appropriated in Fiscal Year 1999.

The existing lock was completed in 1923 by non-Federal interests, and had been leased by the Federal Government since 1944. On 1 July 1986, the lock, adjacent land, and facilities were purchased from the Board of Commissioners of the Port of New Orleans for \$3,800,000. By purchasing the lock, the Corps received fee title to the lock and appurtenances with operation and maintenance responsibility for the St. Claude and Florida Avenue bridges transferring to the Board of Commissioners of the Port of New Orleans.

Based on Congressional committee guidance in the Fiscal Year 1991 Energy and Water Development Appropriations Bill, an Open Planning Process was adopted in an attempt to build consensus among the major stakeholders for siting the shiplock at the Inner Harbor Navigation Canal (Industrial Canal) site. The Corps and the Port of New Orleans were directed to "... develop a comprehensive plan to identify and mitigate to the maximum extent practicable, any adverse social and cultural impacts of the project." The plan will include "... measures to provide adequate housing, street circulation and enhanced neighborhood amenities to insure the communities adjacent to the project remain as complete, livable neighborhoods during and after construction of the project." The legislation specifically directed the Corps to strictly follow Federal historic preservation policies in evaluating the impact of lock replacement. Also, full compliance with the provisions of the 1986 Water Resources Development Act, which requires "full participation of members of minority groups living in the affected areas" in any work related to the replacement of the lock. Finally, the legislation directed the Corps to give "maximum consideration to lock replacement alternatives which minimize residential and business disruption while meeting the goal of improving waterborne commerce. The recommended plan for the lock replacement has complied with all of these requirements. Neighborhood groups, navigation interests, affected businesses, local, governmental officials, and the Port of New Orleans have comprised various committees that have discussed all the major aspects of the various alternatives studied at this site. The Corps of Engineers and the Port of New Orleans have provided the engineering, economic, and social analyses to these committees for their deliberations.

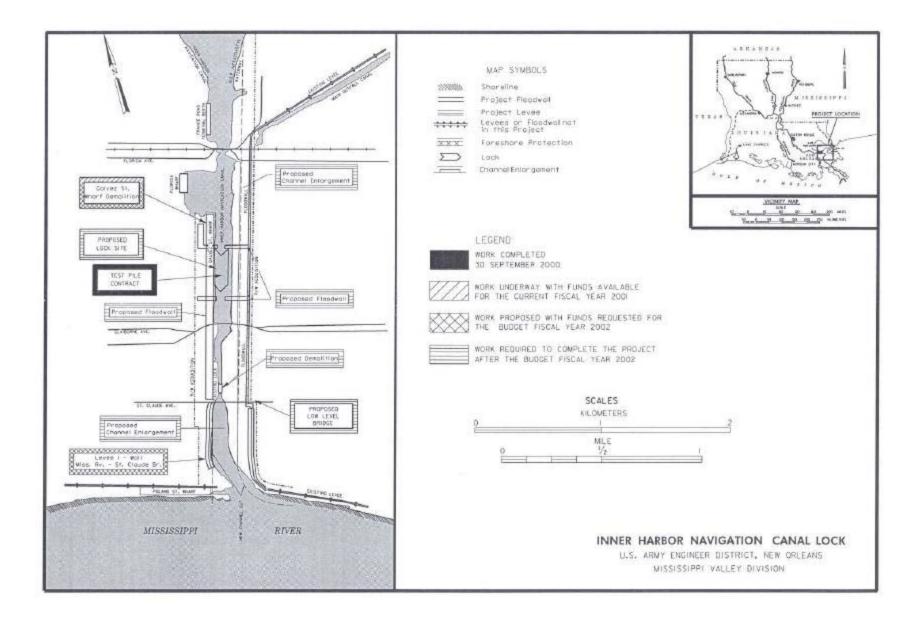
The final Evaluation Report, based on the Open Planning Process, was approved by HQUSACE in February 1998. The final Evaluation Report recommended that a deep draft lock, 36 feet deep by 110 feet wide by 1,200 feet long be constructed at the Industrial Canal site north of the existing lock using a prefabricated float-in construction method that would require no relocation of residents and that a comprehensive community impact mitigation plan (\$35 million) be implemented in conjunction with the project. The mitigation plan was authorized by the Water Resources Development Act of 1996. In an effort to continue to involve the local stakeholders in the implementation and formulation of the impact mitigation plan, a community based committee was formed. The Corps has entered into a Partnering Agreement with the committee for implementation of the mitigation plan throughout the construction period.

On 30 September 1999, a contract was awarded to a team headed by Gregory C. Rigamer & Associates, Inc., to assist in the establishment of a Community-Based Mitigation Committee (CBMC) and the development of the Partnering Agreement. Upon establishment of the CBMC (which includes representatives from local neighborhood business and religious organizations and local residents), the contractor has led the development of a Needs Assessment and the first 3 year-Mitigation Plan. A contract has been awarded to Xavier University for the initial job training contract as the first part of the mitigation plan. Only residents in the affected communities adjacent to the IHNC are presently being trained. Additional measures recommended by the CBMC will be initiated in FY 2001.

To further comply with the provision in the 1986 WRDA of "full participation of members of minority groups living in the affected areas", construction contracts have included Labor Preference Clauses that require 10 percent of the labor force be obtained from the communities surrounding the IHNC. Also, the District has worked with the local Small Business Administration Office and minority contractor groups to assist them in competing for some of the construction work to be awarded on this project.

The existing Florida Avenue bridge (vehicular and railroad) has been assumed in our studies to be replaced by others. The vehicular bridge is scheduled to be replaced by the State of Louisiana. Efforts are underway to coordinate with the City of New Orleans and St. Bernard Parish for construction of a new bridge (not necessarily a high-rise) at Florida Avenue. The railroad bridge has been approved for replacement under Truman Hobbs authority. The Coast Guard recommended that the existing railroad bridge is a hazard to navigation, thereby justifying the use of Truman Hobbs. The Port of New Orleans is responsible for the design and replacement of the railroad bridge, and construction has been initiated.

The Senate Report accompanying the Fiscal Year 1994 Energy and Water Development Appropriations Act included language recommending examination of all alternatives for removing the siphon near Florida Avenue bridge, the convening of all interests to determine the best course of action and preparation of a report on this matter. The Evaluation Report assumes that the siphon will be removed prior to initiating construction of this project, at no cost to the Federal Government. Section 305 of H.R. 4422, the House version of the Fiscal Year 1995 Coast Guard Authorization Bill, states that the removal of the siphon, an appurtenant structure to the bridge, will be accomplished under the provisions of the Truman Hobbs Act.



APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: J. Bennett Johnston Waterway - Mississippi River to Shreveport, Louisiana (Continuing)

LOCATION: The project is located in central and northwest Louisiana and provides a navigation route from the Mississippi River at its juncture with Old River via Old and Red Rivers to Shreveport, Louisiana. The effected parishes and counties for this project include (Louisiana) Caddo, Bossier, Webster, De Soto, Red River, Bienville, Lincoln, Winn, Natchitoches, La Salle, Grant, Rapides, Avoyelles, Concordia; and (Arkansas) Hempstead, Miller, Nevada, Lafayette, and Columbia.

DESCRIPTION: The project provides for a 9- by 200-foot navigation channel extending about 236 miles from the Mississippi River through Old River and Red River to the vicinity of Shreveport, Louisiana. Five locks with dimensions of 84 by 705 by 14 feet and adjacent dams provide a lift of about 141 feet. The project also provides for realigning the channel by means of dredging, cutoffs, and training works and for stabilizing its banks by means of revetments, dikes, and other methods. Recreation facilities and fish and wildlife development are also an integral part of the project. The major unprogrammed work includes recreation sites, and acquisition of a portion of mitigation lands. This project is part of the J. Bennett Johnston Waterway, Louisiana, Texas, Arkansas, and Oklahoma, which also includes the Shreveport, to Daingerfield, Texas (navigation), Shreveport, Louisiana, to Index, Arkansas (bank stabilization), and Index, Arkansas, to Denison Dam (bank stabilization) reaches.

AUTHORIZATION: River and Harbor Act of 1968, Water Resources Development Act of 1976, Supplemental Appropriations Act of 1984, Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, and 2000 and Energy and Water Development Appropriations Act of 1994.

REMAINING BENEFIT - REMAINING COST RATIO: 8.3 to 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 3-1/4 percent (FY 1973).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Reevaluation Report and Final Supplement No. 2 to the Environmental Impact Statement, at 1982 price levels, approved 4 January 1984. Costs for current analysis are based on October 1999 costs deflated to October 1982 price levels.

## SUMMARIZED FINANCIAL DATA

Estimated Federal Cost (COE)	Φ.4	0.45,000,000	\$1,895,807,000
Programmed Construction Unprogrammed Construction		,845,369,000 50,438,000	
Estimated Apprn Requirements (U	IS Coast Gu	ard)	553,000
Programmed Construction		553,000	333,000
Unprogrammed Construction	1	0	
Estimated Non-Federal Cost		45 044 000	91,304,000
Programmed Construction  Cash Contributions	\$ 9,824,000	45,811,000	
Other Costs	35,987,000		
Unprogrammed Construction		45,493,000	
Cash Contributions	26,070,000		
Other Costs	19,423,000		

PHYSICAL

## PHYSICAL DATA

Lands and Damages: 26,000 acres, mitigation of

wildlife losses above mile 104

Channels and Canals: Channel 9 feet deep, 200 feet wide, and 236 miles long from

Old River to Shreveport, Louisiana. Total length of

bank protection - 273 miles

Locks: Number - 5; Size - 84 by 705 feet Dams: Number - 5; Type - Tainter Gated Relocations: Roads (Modify one bridge)

Railroads (Replace one and modify

one bridge)

STATUS **PERCENT COMPLETION** (1 January 2001) COMPLETE **SCHEDULED Entire Project** 90 Indefinite Open to 9-Foot Navigation Dec 87 Lindy Boggs Lock & Dam Dec 87 John H. Overton Lock and Dam Dec 87 Lock and Dam No. 3 Dec 91 1/ Russell B. Long Lock and Dam Dec 94 Joe D. Waggonner, Jr., Lock and Dam Dec 94

<sup>1/</sup> Initial interim pool impounded.

SUMMARIZED FINANCIAL DATA (C	Continued)
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ACCUM PCT
OF EST
FED COST

Total Estimated Programmed Construction Cost Total Estimated Unprogrammed Construction Cost Total Estimated Project Cost	\$1,891,733,000 95,931,000 1,987,664,000 <u>1</u> /	
Allocations to 30 September 2000 Conference Allowance for FY 2001 Allocations for FY 2001 Allocations through FY 2001	1,715,202,000 21,040,000 16,970,000 <u>2</u> / 1,732,172,000 <u>1</u> /	91
Allocation Requested for FY 2002 Programmed Balance to Complete After FY 2002 Unprogrammed Balance to Complete After FY 2002	16,555,000 96,642,000 50,438,000	92

<sup>1/</sup> Includes \$26,654,000 for John H. Overton Lock and Dam and \$21,653,000 for Red River Emergency Bank Protection for construction work.

<sup>2/</sup> Reflects \$3,366,000 reduction assigned as savings and slippage; \$663,000 reprogrammed from the project and \$41,000 rescinded in accordance with Consolidated Appropriations Act, 2001.

JUSTIFICATION: The Red River is a very erratic river, subject to wide fluctuations in stage and meandering because of the erodible soils. For navigation to become a reality on Red River, a system of dependable pools and a properly aligned channel are necessary. The pools are provided by locks and dams and the proper alignment is provided by bank and channel stabilization works. These works preserve lands and improvements along the navigation route. Dredged material disposal sites for construction and maintenance are within the limits of the river bank or areas furnished by local interests at no cost to the United States. With preproject open river conditions, the controlling depths for navigation from January to July are 9 feet from the Mississippi River to the mouth of the Black River, 6 feet from the mouth of the Black River to Alexandria, Louisiana, and 5 feet to Shreveport, Louisiana. During the remainder of the year, controlling depths are generally about 9 feet from the Mississippi River to the mouth of the Black River, about 4 feet from there to Alexandria, and 1 to 2 feet to Shreveport. On 31 December 1994, a 9-foot-deep by 200-foot-wide navigation channel was opened from the Mississippi River to Shreveport. The channel provides dependable 9-foot navigation depths year-round.

Navigation from the Mississippi River to Shreveport will provide an artery for low-cost transportation which, will stimulate economic growth of the region. Estimated savings are based on an average annual movement of 7,845,000 tons. 1998 waterborne commerce tonnage on the waterway was 3,749,000 tons including all commodities that transited any portion of the system. Commodities to be carried over the waterway include iron and steel products and pipe, industrial chemicals, paper and allied paper products, petroleum and petroleum products, other metals and ores, sulphur, agricultural chemicals, and grain. The public will realize an average annual savings of \$68,831,000 which will result from reduced transportation costs. Several local entities are actively involved in port development on the waterway. The city of Alexandria has constructed port facilities in Pool 2 for use by industry. The Natchitoches Parish Port in Pool 3 was opened in 1996, and a wood chip mill has been constructed at the port. The Caddo-Bossier Port in Pool 5 was officially opened in April 1997 with 209,000 tons shipped that year. Commodity movements through the port increased to 375,000 tons in 1997, and is steadily increasing. Red River Parish has also initiated actions to develop a port site in Pool 4. These ports will be able to accommodate tows or barges of various sizes. The usable lock dimensions were designed for a configuration of six barges with individual dimensions of 35 by 195 feet and a towboat. Larger grain and petroleum barges can also be expected to call at the ports. The project is credited with benefits derived from transportation savings from use of the waterway, flood control, damages prevented by bank stabilization, security against levee crevasses, fish and wildlife, recreation, area redevelopment, reduced maintenance on existing revetments, reduced sedimentation, irrigation, reduced costs of municipal and industrial water supply, and reduced pumping costs.

The average annual benefits are as follows:

Annual Benefits	Amount
Navigation	\$ 68,831,000
Flood Control	2,037,000
Bank Stabilization	16,602,000
Fish and Wildlife	460,000
Recreation	4,435,000
Area Redevelopment	14,808,000
Other:	
Irrigation and reduced costs of municipal	
and industrial water supply	53,000
Total Annual Benefits	\$107,226,000

FISCAL YEAR 2002: The requested amount will be applied as follows:

## Pools 1-5

Complete:	
Ronnia	Reinforcement

Recreation Facilities at Locks & Dams 3,4,5 Coushatta/Stoner Comfort Stations Grand Ecore Visitor Center	235,000 56,000 2,000,000
Subtotal	\$ 2,952,000
Continue:  Below Lindy C. Boggs L&D Reinforcements Grand Bend Capout Pool 3 Reinforcements Coushatta Capout & Dikes Shreveport Visitor Center	1,114,000 2,905,000 1,534,000 1,000,000 2,500,000

Subtotal \$12,853,000

Planning, Engineering and Design

Supervision and Administration

Mitigation

Continue:

Loggy Bayou \$ 750,000

Subtotal 750,000

GRAND TOTAL \$16,555,000

NON-FEDERAL COST: With the exception of the Louisiana-Arkansas Railroad Bridge Relocation and the mitigation element, local interests are required to provide all lands, easements, and rights-of-way, including a proportionate share of the cost of the bridge relocations over existing channels in accordance with the principles of Section 6 of the Bridge Alteration Act (Truman-Hobbs) of 21 June 1940, as amended by the Act of 16 July 1952, 25 percent of the cost of necessary retaining dikes for dredged materials and 50 percent of the total cost of recreation facilities. Non-Federal costs associated with the total project are broken down as follows.

\$ 661,000

2.500.000

1.300.000

3 April 2001

The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas	\$ 36,459,000	\$
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	11,096,000	211,700
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities	41,217,000	1,448,000
Pay 6 percent of the first costs allocated to fish and wildlife and pay 6 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	527,000 <u>1</u> /	332,800 <u>2</u> /
Pay 25 percent of the first cost allocated to retention dikes required for construction and maintenance dredging	2,005,000	31,200
Replacement costs		302,900
Total Non-Federal Costs	\$ 91,304,000	\$ 2,326,600

<sup>1/</sup> Since the local sponsor will assume all operation and maintenance costs and this cost will exceed the 6 percent local share, there will be no local requirement toward implementation costs for Loggy Bayou increment. Implementation costs shown are for the Bayou Bodcau increment.

3 April 2001

Annual

<sup>2/ 100</sup> percent of annual management costs for Loggy Bayou and Bayou Bodcau increments.

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction. Non-Federal cost associated with the scheduled portion of the project are broken down as follows:

Lands and Damages	\$ 18,999,000
Utility Relocations	8,101,000
Recreation (Other)	8,887,000
Cash Contribution:	9,824,000
Recreation Facilities	(6,312,000)
Bridge Relocations	(1,006,000)
Retaining Dikes	(1,973,000)
Mitigation	(533,000)
T	<b>#45 044 000</b>
Total	\$45,811,000

STATUS OF LOCAL COOPERATION: Formal assurances of local cooperation were furnished by the Red River Waterway Commission on 26 February 1969 and accepted on behalf of the United States on 15 April 1969. That agency was formed expressly to provide the local cooperation required for the project and has levied a 2-mill assessment to fulfill its obligations. Amended assurances covering the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, and the specific written agreement requirements of Section 221 of the Flood Control Act of 1970, Public Law 91-611, were executed by the Red River Waterway Commission on 23 May 1973 and were accepted on behalf of the United States on 14 November 1973. A cost sharing agreement covering nine recreation sites in Pools 1 and 2 was approved by the Deputy Chief of Engineers on 23 July 1985. A Memorandum of Understanding between the Corps and the local sponsor for development of these nine sites was executed in January 1986. A supplement to this cost-sharing agreement was executed in the last quarter of FY 1994 to cover the advance construction of three boat ramps and ancillary facilities in Pools 4 and 5 in FY 1995. In the Conference Report that accompanied the Energy and Water Development Appropriations Act of 1993, Congress directed the Corps of Engineers to prepare a supplement to the recreation master plan to serve as the project document to support the contract for recreation development in Pools 3 to 5 was executed in April 2000.

The Red River Waterway Commission agreed by letter dated 6 September 1983 to fulfill all responsibilities of the local sponsor relative to the purchase of wildlife mitigation lands. The Louisiana Department of Wildlife and Fisheries, by letter dated 22 July 1983, agreed to assume operation and maintenance responsibilities for acquired wildlife mitigation lands. Updated letters of agreement covering the mitigation plan as presently conceived (i.e., acquisition of up to 5,000 acres in the vicinity of Loggy Bayou) were furnished by the Red River Waterway Commission and the Louisiana Department of Wildlife and Fisheries on 13 August 1990 and 17 August 1990, respectively. The Local Cooperation Agreement between the Federal Government and the State of Louisiana for the acquisition of up to 5,000 acres of mitigation lands in the vicinity of Stumpy Lake/Swan Lake/Loggy Bayou Wildlife Management Area was executed by the Red River Waterway Commission in May 1993 and by the Assistant Secretary of the Army in June 1993.

The Red River Waterway Commission furnished a letter of agreement to support the Bayou Bodcau mitigation increment subject to certain conditions on 9 September 1992. All conditions with the exception of one had been resolved prior to passage of the Energy and Water Development Appropriations Act of 1994. Passage of the Act resolved this last condition, which involves how the costs for the Federal share of operation and maintenance undertaken by the Red River Waterway Commission will be treated by authorizing annual reimbursement in lieu of crediting. All Red River Waterway Commission conditions were satisfactorily resolved, and the Project Cooperation Agreement covering the acquisition of mitigation lands in the vicinity of the Bayou Bodcau Wildlife Management Area was executed in June 1996.

The Red River Waterway Commission furnished a letter of agreement dated 10 October 1997 supporting additional mitigation lands in Red River and Caddo Parishes that are to be considered adjacent to the Loggy Bayou Wildlife Management Area. These new areas were directed in the Water Resources Development Act of 1996. A report detailing a plan of action to acquire these lands was processed as directed by the legislation. Amendment No. 1 to the June 1993 Loggy Bayou Area Local Cooperation Agreement covering the initial acquisition effort in Caddo Parish was executed by the Red River Waterway Commission and the Assistant Secretary of the Army in October 1999.

Pool 3 will require new structural features at Nantachie Lake so that the lake can continue to be drawn down subsequent to pool impoundment. As a result, the Red River Waterway Commission was requested to agree to accept operation and maintenance responsibilities for the new Nantachie Lake drawdown structure and to agree to provide amended assurances of local cooperation to this effect in December 1993. At the same time, they were also requested to agree to accept responsibility for related modification or replacement of bayou crossings downstream of Nantachie Lake. The sponsor has not yet agreed to accept responsibility related to the bayou crossings. Review and sponsor coordination of agency responsibilities associated with this work continues.

The Red River Waterway Commission is providing its share of the project first costs by furnishing the necessary lands, easements, and rights-of-way, performing utility relocations as needed, and providing cash contributions for recreation facilities, bridge relocations, and retaining dikes. They will contribute their share of retention dike construction for maintenance dredging by cash contribution and they will provide the lands, easements, and rights-of-way for these dikes.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate (Corps of Engineers) of \$1,895,807,000 is an increase of \$2,156,000 from the latest estimate (\$1,893,651,000) presented to Congress (FY 2001). This change includes the following item.

Item	Amount	
Price Escalation on Construction Features	\$ 2,156,000	
Total	\$ 2.156.000	

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final statement was filed with the Council on Environmental Quality on 11 May 1973. The Environmental Impact Statement is included in the project "Red River Waterway." Supplement No. 1 to the Environmental Impact Statement was prepared for the Mississippi River to Shreveport reach of the J. Bennett Johnston Waterway due to a change in project alignment from the authorizing document, and to include updated environmental information due to a reanalysis and to include results of the ground-water studies. The final Supplement No. 1 was filed with the Council on Environmental Quality on 18 February 1977, and published in the Federal Register on 25 February 1977. A third Environmental Impact Statement (Supplement No. 2) was submitted to the Environmental Protection Agency in final form on 10 November 1983, and the record of decision was signed by the Division Engineer on 4 January 1984. This supplement was necessary to document the expanding base of data and design information being developed and accompanied the General Reevaluation Report.

An Environmental Assessment was prepared for Pool No. 2 to present the results of investigations of the impacts of the 58- and 64-foot elevations. The Environmental Assessment resulted in a Finding of No Significant Impact which allowed a design change from 58- to 64-foot pool elevations. Following review by the public, the Finding of No Significant Impact was signed on 21 April 1982.

An Environmental Assessment of the Loggy Bayou Area mitigation increment has been performed. This area was not included in the original mitigation report. The Environmental Assessment was required to satisfy the National Environmental Policy Act. The Environmental Assessment resulted in a Finding of No Significant Impact, which was signed 11 January 1993. Environmental Assessment's are required to present the impacts associated with the construction of riverside levee protection berms in Pools 3 and 5. The berms are necessary to ensure the integrity of the existing flood control levee system. The Environmental Assessment for the berms in Pool 3 resulted in a Finding of No Significant Impact, which was signed on 16 July 1992. The Environmental Assessment for the berms in Pool 5 also resulted in a Finding of No Significant Impact which was signed on 24 May 1993.

Environmental Assessments are also required for the Bayou Bodcau mitigation increment and the Nantachie Lake drawdown structure to satisfy National Environmental Policy Act requirements. The Bayou Bodcau mitigation Environmental Assessment resulted in a Finding of No Significant Impact that was signed on 28 April 1995, and the Nantachie Lake drawdown structure Environmental Assessment was completed in FY 1996, also resulting in a Finding of No Significant Impact. An Environmental Assessment for the mitigation lands to be acquired in Caddo and Red River Parishes will be done at the appropriate time. An assessment of the initial tract in Caddo Parish has been completed, and resulted in a Finding of No Significant Impact that was signed on 23 September 1999.

A Final Environmental Assessment has been prepared covering instream disposal of maintenance dredge material in Pools 3, 4, and 5 in lieu of disposal in contained upland areas. A Finding of No Significant Impact was signed on 19 March 1996.

A Final Environmental Assessment has been prepared covering maintenance dredging of the oxbow lakes designated for preservation in project documentation. The dredging consists of maintaining a 5-foot-deep by 20-foot-wide connection from the river into the oxbow lakes in order to achieve all project benefits. The dredged material will be disposed of instream. A Finding of No Significant Impact was signed 18 November 1997.

An Environmental Assessment and Finding of No Significant Impact are included in Supplement No. 2 to the Recreation Master Plan which presents the revised plan for recreation development in Pools 3, 4, and 5. Supplement No. 2 was approved by the Mississippi River Commission on 1 May 1998. The Finding of No Significant Impact was signed on 6 October 1997. An Environmental Assessment was performed in FY 2000 for the Hampton's Lake Recreation Area that was added to the Pools 3 to 5 Master Plan by August 1999, Supplement No. 3. A Finding of No Significant Impact was signed on 24 May 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1971 and allotted in FY 1972. Funds to initiate construction were appropriated in FY 1973.

The Energy and Water Development Appropriations Act of 1996 authorized a Regional Visitors Center in the vicinity of Shreveport. The Energy and Water Development Appropriations Act of 1997 provided \$3,000,000 and directions to initiate design and construction of the Regional Visitors Center in FY 1997. The 1997 Appropriations Act also provided funds to initiate design of the previously authorized Project Visitors Center at Grand Ecore. Design for both of the Visitors Centers has recently been completed, but delays have been experienced as a result of site availability issues. Design, construction, and operation and maintenance of the Visitors Centers are to be at 100 percent Federal expense. The FY 2001 Appropriations Act (P. L. 106-377) directs the use of available Construction, General funds, in addition to the funds provided by the FY 1997 Appropriations Act, to complete design and construction of the Regional Visitor Center at an estimated cost of \$6,000,000.

The Draft Master Plan Supplement No. 3 covering adjustments to cost-shared recreation facilities in Pools 3, 4, and 5 was approved by the District Commander in September 1999. The Project Cooperation Agreement covering the same recreation facilities presented in Supplement Nos. 2 and 3 was executed in April 2000.

The Water Resources Development Act of 1996 increased the total cost of the Loggy Bayou mitigation increment to \$10,500,000. It further provided that lands that are purchased adjacent to the Loggy Bayou Wildlife Management Area may be located in Caddo Parish or Red River Parish. The Water Resources Development Act of 1996 also modified the waterway project to require the Secretary to dredge or perform other related work as required to reestablish and maintain access to, and the environmental value of, the bendway channels designated for preservation in previous project documentation. Further, this work shall be carried out in accordance with the local cooperation requirements for other navigation features of the project. These project modifications are subject to completion of reports showing the work is technically sound and environmentally and economically acceptable, as applicable. The favorable bendway channel (oxbow lakes) dredging report has been returned by OMB for the development of supplemental environmental data and resubmission, and will be resubmitted in late FY 2001.

The Water Resources Development Act of 1986, as modified by the Water Resources Development Acts of 1988, 1990 and 2000, and the FY 1990 and FY 1994 Energy and Water Development Appropriations Acts, authorized the wildlife mitigation project for the waterway above mile 104 to Shreveport, Louisiana, at a total cost of \$9,420,000. The Water Resources Development Act of 1990 modifies the mitigation project by authorizing the Secretary of the Army to acquire an additional 12,000 acres adjacent to or close to the Bayou Bodcau Wildlife Management Area. The real estate design memorandums, which present the real estate requirements for the Loggy Bayou area and Bayou Bodcau area mitigation lands, have been approved. The Chief of Engineers report on mitigation was returned unendorsed to the Secretary of the Army by the Office of Management and Budget because it does not clearly demonstrate compliance with the Administration's policy on mitigation. A supplemental report which provides the requested information required to demonstrate compliance was submitted to the Assistant Secretary of the Army. The supplemental report, which was submitted prior to passage of the FY 1990 Energy and Water Development Appropriations Act and the Water Resources Development Act of 1990, recommends the acquisition of only 300 acres in the Stumpy Lake area and no lands in the vicinity of the Bayou Bodcau Wildlife Management Area. In the Energy and Water Development Appropriations Act of 1994, the Corps was directed to reimburse the project local sponsor annually for the Federal share of management costs for the Bayou Bodcau mitigation area. The Water Resources Development Act of 2000 modifies the mitigation project by authorizing the purchase of mitigation land from willing sellers in any of the parishes that comprise the Red River Waterway District, consisting of Avoyelles, Bossier, Caddo, Grant, Natchitoches, Rapides, and Red River Parishes.

